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℞ Cornu: Cervi: pulverisat
Eboris
Turmeric
Rad: Gentian: an: ℥i
Cinamon:
Croci
diarhod abbatis: an ℥i

Misto fiat pulvis: cujus capiat ℥j: malig vino et vespertino
et quarta pomeridiana in haustu vini medici sequent

℞ vini Canarin ℔i
Millepid: præparat: et pulveri: ℥ij
Cortic arboris barbar: m·i·
Croci in nodul: infusi ℥i
præpar: infundantur ut artis est
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II. The several *Causes* } of every Disease.
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Nich. Culpeper, Gent. Student in Physick, and Astrology.

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To the Reader.

Concerning the Order or Method of the whole Work.

THe Infirmities that hurt mens bodies (which are against and besides Nature) being Three namely, The *Diſeaſe*, the *Cauſe*, and the *Symptome*. We ſhall begin at thoſe Infirmities which are manifeſt to ſenſe, which the Patient and all Standers by may eaſily perceive, and ſuch as they firſt complain of to the Phyſitian: And according to theſe manifeſt Infirmities we have in all our practical writings, divided the Heads.

Theſe Infirmities are commonly *Symptomes*, all which are apparent to *Senſe*, and are ſigns of other Infirmities from whence they proceed, namely, of the Diſeaſes and cauſes of them, which two are propounded and explained in the cauſes of the *Symptomes*. Therefore we propound no peculiar heads of ſecret Diſeaſes that are not apparent to ſenſe (as of the Diſtemper or obſtruction of the Liver or Stomach) as others do who in writing their practice, ſometimes treat in their Chapters under the names of Diſeaſes, and ſomtimes under the names of Symptomes. But we treat only under the names of Symptomes, and deſcribe their Diſeaſes in the cauſes (as in thoſe mentioned of the Liver and Stomach, and in the cauſes of Heart-burning, Loathing, Vomiting, Cachexy and Dropſie) The Diſeaſes apparent to Senſe as thoſe that are without, as Tumors, Ulcers, &c. and the like, are explained as Symptomes, in their particular chapters. Moreover in regard theſe Infirmities apparent to ſenſe are ſeldom ſimple, or one alone, but many, and of divers kinds; we (although they ſhal be mentioned in general) ſhall treat particularly of them in their Kinds, Cauſes, and Cures, where they moſt declare themſelves: As for example; although we ſpeak particularly of a *Suffuſion* which is a Film in the Eye that hinders Sight, in the chapter of the hurt of Sight, yet we ſpeak alſo of it in the general, in the Deſcription of Faults in the Eye.

The cheif kinds of all Diſeaſes apparent to ſenſe, are obſerved in the Hurt of Functions of Man, or other accidents, as moleſtations and pains, Deformities and Corruptions: or in things ejected.

In this work we ſhall ſpeak firſt of the Functions Hurt, how they are out of order, either in quantity when they are defective wholly, or in part; or in quality when they are depraved, or not right. The firſt Book ſpeaks of the *Hurt of Senſe*, the ſecond, of the *Hurt of Motion*, under which all the Hurts of Functions are comprehended. In the Books following, we ſhal ſpeak of Accidents, and things ejected.

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THE FIRST BOOK OF THE Hurts of the Functions.

Containing the Hurt of the *SENSES.*

THe Senses are Internal or External, we shall speak first of the Internal, for they being hurt, the External Senses and motions are somtimes offended, the Internal Senses are three. Imagination, Reason, and Memory, which we call all together by the name of the Mind, when these are hurt they either suffer all together or particularly.

The Functions of the mind are defective, when they are Diminished or Abolished. For by accident when the vital motion is hurt, these Functions may cease as well as the rest in the whole Body, but then they are refer'd to the hurts of vital motion, and there explained.

The Functions of the Mind are diminished, when they do not sufficiently act, in their divers kinds, as when there is dulness of Mind, slow Wit, Imprudence, forgetfulness of which we shall speak in Imbecility of Mind, the first Chapter, Page 1.

The Functions are abolished when they are not, as in divers kinds of Sleep and Astonishments, as when there is immoderate Sleep, or profound Sleep, Carus, Lethargy, Typhomania, Devilish Sleep, Sleep with astonishment, Ecplixis, Apoplexy, Epilepsie, Convulsion, Catalepsis or Congelation, Extasie. Of which we shall speak under the title Consternation of Mind, Chapter the second, Page 4.

The actions of the Mind are depraved when they are, but not decently; as they should be; or more then they ought to be.

The internal Senses are prepostorous in divers kinds, as when there is Foolishness, Drunkenness, commotion of Mind, Love, Melancholy, Hypochondriack Melancholly, Madness, devilish Possession, fear of water, Phrensie, Paraphrenitis, Saltus vitæ, of which under Alienation of Mind, Chapter the third, Page 26.

The Functions are more then ordinary in Watchings and Dreams, of which we shall speak in Defatigation of Mind, Chapter the fourth, Page 47.

The external Senses are five: Touching, Tasting, Sight, Hearing, Smelling, these are either Defective or Depraved, when out of order.

The kinds of Defect and Depravation of Touching are Numness or Stupor, Formication, false Sense of heat or cold Hæmodia of which in Hurt of Touching, Chapter the fifth, Page 50.

The Tast is abolished, Diminished and Depraved in the defect of Tasting and in a Depraved or half Tast, of which in Hurt of Tast, Chapter the sixth, Page 52.

The sight suffers many inconveniences when either it is not, or is diminished, or is Evil, as in divers kinds, especially in Blindness, Anaurosis, Scoloma or Mist, Amblyopia,

Amblyopia, Catigo, *Evil ſight in young or old*, Myopia, Nyctalopia, Veſpertina, Acies or *Owle ſight*, Hallucination, Imagination, Nubecula *or* Cloud, Colours, *falſe* Splendors, Megrim, Scotodinos, *of theſe in* Hurt of Sight, Chapter the ſeventh, Page 56.

The hearing alſo ſuffers, in Surdity or Deafneſs, thick Hearing, Obaudition, tinckling, and hiſſing in the Ears: as in Hurt of Hearing, Chapter the eight, Page 80.

The Smelling is alſo Aboliſhed, Diminiſhed or Depraved, as in defect of Scent and Depravation of ſcent, of theſe in Hurt of Smelling, Chapter the ninth, Page 87.

CHAP. I.

CHAP. I.

Of a Weakneſs of the Minde.

The Kinds of it.

A *Weakneſs of the Minde* may be ſaid to be, whenas any one is leſs able in Apprehenſion or Wit, in Judgement or Reaſon and Memory, then an ingenious and induſtrious Man. Which ſomtimes happens in Diſeaſes, at other times befals thoſe that are not Sick, but otherwiſe Well, of which we will here Treat. But

Dulneſs of the Minde.

ſomtimes theſe internal ſenſes are all of them together dulled, and both Wit, Judgment and Memory fail, and then it may be called *a dulneſs of the Minde.*

Of ſlowneſs of Wit.

Otherwiſe ſome want Wit, when they ſcarcely learn to ſpeak, and they apprehend Learning, and other Arts with difficulty; and it may be called *a ſlowneſs of Wit.*

Imprudence, a defect of judgment.

Somtimes they are void of Judgment, in judging of thoſe things which they have apprehended, and this may be called *Imprudence.*

For the moſt part the Memory is weakned when they hardly retain thoſe things which they have apprehended

Oblivion

and learned; and its called *Oblivion*, of which fault many do complaine, eſpecially the Aged, and therefore Phyſitians have

The Memory impaired

made mention of that only almoſt in their Cures, under their Titles *of the Memory impaired:* whereas the defects of the other internal ſenſes alſo have the ſame Cauſes, and the ſame Cure; which we ſhall at once apply to them all.

The Cauſes.

The Part affected.

But the Brain which is the organ of theſe ſenſes, is here affected; the which notwithſtanding is not ſo vehemently hurt, that theſe internal ſenſes are wholly aboliſht or together with them, the external ſenſes alſo and motion; as it doth happen in grievous hurts of the Brain. But that more or fewer ſenſes are weakned, and thoſe more or leſs, that happens according as the whol ſubſtance of the Brain is affected, or only part of it: not as the formoſt, middle, or hindermoſt ventricles are affected, as ſome would have it; furthermore theſe things vary according to the Nature of the Diſeaſe, with which the Brain is afflicted, as ſhall be ſaid.

Weakneſs, a Cauſe of the Mindes weakneſs.

Some have contracted and derived this weakneſs Hæreditary *from their Parents* by inbred Cauſes; whence it often comes to paſs that as the ingenious and induſtrious do beget their like, ſo drones beget drones which is eaſily collected by their Signs, that they were ſuch from their Infancy, and had ſuch Parents. This happens to ſome by reaſon *of Age*, whence old folks become for the moſt part forgetful and ſomtimes dul, by reaſon of the defect of native heat, unleſs it happen from ſome diſtemper of the Brain as ſhall be ſaid by and by.

A Concuſſion or blow of the Head, leaving behind it ſome weakneſs in the Brain, may alſo be the cauſe of it.

Alſo *too great a ſhedding of Blood* from what part of the Body ſoever, or ſome other too great evacuation exhauſting the Spirits: on which ſcore alſo *too much Venery* doth very much impare the ſenſes, eſpecially the Memory.

Alſo *a Diſeaſe of long continuance* deſtroying the native heat, eſpecially of the Head, as after *a Carus*; alſo after *Melancholy*, and *Convulſion*, we have ſeen men become very forgetful. Or *a Malignant Diſeaſe, or proceeding from ſome Poyſon*, of which nature perhaps that was, which given to *Ulyſſes* companions by *Circe*, took away the remembrance of all things paſt, the which alſo ſomtimes *Love Potions* have done; and *the unhappy uſe of Narcoticks* may do the like.

One writes that *by reaſon of a Wound ſtruck deep into the ſeat of the Eye*, one did ſo far looſe his Memory, that he was fain to learn a new the grounds of learning whenas before he was skilled, both in Greek and Latin.

Alſo when *the Functions of the Minde are more remiſſly imployed*, then the native heat growing dul with idleneſs, and not brought into act, they proceed but ſluggiſhly,

Which alſo may happen upon the contrary reaſon, to wit, if *the Minde be diſquieted with too much ſtudy, thoughts, watchings, cares.* Yet when the Memory for the moſt part is firſt hurt, eſpecially in the aged; their judgment notwithſtanding continues acute. That it doth not happen to them only by reaſon of weakneſs, though by this means alſo it may happen, may be elegantly collected thus, becauſe their Minde, which through the whol ſpace of their life hath received ſo many Species, Images, and Conceptions of things, is ſo overwhelm'd with them, that it cannot long retain thoſe new ones which it receiveth, as if there were no more place left for them; whence alſo it comes to paſs that old men do firmly retain to the laſt, thoſe things which they apprehended, when young; but thoſe things which they treat and think of now ſtrucken in Age, they indeed do eaſily conceive, and they judg right and well; but they preſently forget them again: in like manner after ſome ſort as we ſee moſt old men, to ſee and judg of things far diſtant, more rightly then of thoſe neer hand; the which notwithſtanding doth proceed from another cauſe, as we ſhall explaine *in the weakneſs of the Sight.*

Furthermore, and *if the Minde be diſtracted with divers Studies* and be overwhelm'd at once with many things, it comes to paſs that the ſenſe being Intent on many things is not only leſs fit for each particular, but alſo that while theſe things do confound one another, and one is hindred and obſcured by another (as when two griefs moleſt one part, the more vehement is wont to obſcure the other) the Memory of that which is weakeſt, doth preſently alſo vaniſh.

The fault of the inſtrument is a Cauſe of the weakneſs of the Minde.

The imperfection of the inſtrument alſo doth make the internal ſenſes more languid. In tender Infants, whoſe Brain is yet more ſoft and fluid, and not yet perfected by grouth it performs but dul operations. In thoſe of riper age alſo, if the Brain hath not obtained its juſt bulk, and then for the moſt part they have a ſmal Head.

An uncomely Figure of the Brain, and *a perverſion of its Scituation*, cauſed either *by Nature* or *by Violence* doth cauſe the ſame; which is hardly known unleſs the Head anſwer to the form of the Brain.

The temper of the Brain changed doth cauſe a weakneſs of Minde.

The Temperament of the Brain changed from its Natural ſtate, as yet not producing more grievous Diſeaſes of the Brain, doth alſo cauſe that *ſluggiſhneſs of the internal Senſes.*

And that eſpecially when it is *more moiſt* then it ought to be by Nature, which Phyſitians hold to be the chief cauſe *of the Memory impaired*, and that becauſe in a more moiſt Brain, and therefore ſofter, the Images of things imprinted can leſs remain. But we believe that comes to paſs, becauſe it becomes more languid to exerciſe its Operations. But the cauſe of this Moiſture ſomtimes depends on ſome cold and moiſt Diſeaſe of the Brain foregoing, from which, though for the moſt part it be taken away, yet this moiſt conſtitution imprinted on it doth remain; which alſo may be from external cauſes of the Air and Medicines. But this defect is known to proceed from Moiſture, becauſe then *they are ſleepy*, and by other ſigns of a moiſt Brain. Alſo *a more dry* conſtitution of the Brain is held to be the Cauſe, becauſe they hardly apprehend things, and becauſe in a dry Body, things are more difficultly imprinted; and many alſo do teach that *this Dryneſs* may be the cauſe *of Oblivion*, and declare the Cure *of the Memory impaired by Dryneſs*, whenas after *burning Feavers*, after too much *watching and ſtudy*, the memory becomes *treacherous*, which we have taught formerly to happen rather from a weakneſs contracted thence.

The Cure.

A Prediction.

The defect of the internal ſenſes *is incurable* if it happen from a weakneſs contracted from *the Parents*, or *by reaſon of Age*, or from ſome *eminent hurt of the Brain*: or if it ariſe from *a perverſe conformation of the Brain.* Alſo *that preternatural conſtitution imprinted on the Brain*, whether it be *moiſt* or *dry*, *is hardly* corrected: yet for the correcting of that, to which Phyſitians do chiefly apply their Cures, in treating of *the Memory hurt*: we alſo ſhall ſhew the manner of operation, how thoſe faults may at leaſt be corrected, if not wholly taken away.

The Cure of the weakneſs of Minde, from weakneſs, and a too moiſt temper of the Brain.

Exerciſe, As it doth ſet an edge on all dul functions, and as it were bring them into Act, may alſo do good here in the operations of the Minde if they be dulled by reaſon of the ſluggiſh and remiſs uſe of them. Alſo in a weakneſs, although it can ſcarce be mended; ſince that the native heat is renewed by exerciſe, and cuſtome is a ſecond Nature, *the exerciſe of the Minde* may do ſomwhat at leaſt in this. But in a *moiſt temper of it*, when as the agitations of the Minde doth conſume Excrements, it will do good.

This may be done by often exerciſing theſe Functions of the Minde, thoſe eſpecially which are done with pleaſure (ſince nothing is to be done againſt *Nature*) and thoſe either all together; or ſingly *the Wit*, if they learn to ſpeak, learning languages and arts, by which the apprehenſion and *Wit* is made acute, which otherwiſe growes dul by idleneſs. *The judgment*, if they diſcerne and judg of things eſpecially things ſcrupulous, and that often; as we ſee many ignorant of law by uſe to have acquired a natural knowledg and prudence in the laws. They may whet *the Memory* by ſtudying to remember and retain, and committing other arts to Memory; in which this is particularly to be obſerved, that thoſe things which are conceived and repeated in the evening after ſupper before ſleep do remain more firmly imprinted in the morning.

Alſo *a reſt* of the Functions of the minde, being wearied with too much uſe and watchings, and ſo at length weakned, doth much refreſh them.

Which is done if they moderat themſelves from the too much ſtudy of knowing or handling of things, and from the immoderate affections of the Minde; if they ſleep at due times, and as much as is needful, whenas ſleep is the reſt of the Minde, and by it the internal actions of ſenſe are reſpited, unleſs in ſome ſort they do a little exerciſe themſelves in dreams.

As concerning *Evacuations*, if the ſluggiſhneſs ariſe from a too moiſt conſtitution of the Brain, and there be plenty of Excrements in the Brain, they muſt be emptied ſucceſſively, as is wont to be done in Diſeaſes of the Brain, ariſing from flegmatick and ſerous Humors; which may be done by this Method.

The common Excrements muſt firſt be waſhed away, with this fallowing *Clyſter* or the like; as, Take *of the Herbs Mallows, Marſh-mallows, Pellitory of the Wall, Beets, Mercury, Betony, Sage, Hyſop, of each one handful; the flowers of Chamomel, Melilote, Elder, Lavender, of each one pugil; Bran one pugil; Fennel and Caraway ſeed, of each three drams; make a Decoction*: Diſſolve in it, *of the juyce of Mercury, one ounce; of Honey, one ounce and an half; Oyl of Rue, two ounces; of Benedicta Laxativa, or ſome ſtrong Hiera, half an ounce; of Salt, one dram.* Make a Clyſter.

Then the humors muſt be prepared with this Decoction, Take *of the Roots of Orrice, the true Acorus, Elecampane, of each half an ounce; Pellitory of Spain* (it helps the Memory much) *Galingal, Ginger, of each two drams; the Herbs Betony, Marjoram, Time, of each half an ounce; Balm, two drams; the flowers of Lavender or Spike, Sage, French Lavender, of each two drams; Roſemary flowers, three drams; Liquoriſh, ſix drams; Anniſ and Fennel ſeed, of each one dram and an half; Caraways, one dram; Cubebs, half a dram: Make a Decoction in Wine and Water*: And in a pound and an half of that ſtrained, Diſſolve of *Honey or Sugar as much as is ſufficient*, Aromatize it with *Cinnamon and Nutmeg*. For five or ſix mornings.

A Wine may be made with the infuſion of theſe, with *the Honey and Sugar* if they like ſweet things, if not, you may ſubſtitute *Wormwood* in their room, with whoſe ſmel they are much delighted, and abhor not the bitterneſs of it.

The ſame may be done *with Syrups*, if leſs pains, and more gratefulneſs be required: Take *of the Syrups of Betony and French Lavender, Honey of Roſes, of each half an ounce; of the Water of Betony and Marjoram a double quantity*, Aromatize it with *Cinnamon*; Let him drink as often of it, as was ſaid *of the Decoction.*

This being done, Purge the Body with theſe *Pills*: Take *of Cochiæ Pills, two ſcruples; of Caſtor* ('tis peculiarly good) *half a ſcruple; with ſweet Wine*: Make up *Pills.*

Or

Or with this potion, Take *of the electuary Diacarthamum, two drams; or one Doſe of any other Phlegmagoge, of Agarick infuſed in Oxymel, one dram; Syrup of Liquoriſh, one ounce; the Waters of Balm and Betony as much as is ſufficient:* And make a Potion.

This being done, and the Brain ſtrengthned, as it ought to be after purging, if the Head be ſtil excrementitious, theſe things may be repeated preſently, or at fit time, or by interuals.

Which may be done by *a Syrup* which may be prepared out of the precedent *Decoction*; adding, *Senna, wild Saffron, Agarick, Turbith,* to which we may add, *Sea Fennel,* ſince that if it be new, it doth purge Flegm, and with an addition of *Sugar* and *Honey:* Boyl them to a conſiſtence.

Alſo *the uſual Pills that purge Flegm,* may be made uſe of.

Wines are leſs proper if they ought to be kept long, when as they do eaſily corrupt; but if purging be to be uſed for five or ſix daies together, they may be made of the ſame things, as the Decoction was, infuſed in Wine.

Alſo if a wateriſh humor abound, the Head muſt be purged by times; *by particular Evacuations*, called *Head purges*, as *Maſticatories, Gargariſmes, Errhines,* as it hath been ſaid in its proper place.

As concerning *things Alterative,* all thoſe things which ſtrengthen the Head, and ſtir up its innate heat, being applied inwardly and outwardly may do good; amongſt which, thoſe that act potentially, ought to be moſt hot in this moiſt conſtitution of the Brain, whereas this is ſo imprinted, and the temperament of the Brain ſo changed, are hardly reduced, and therefore require ſtronger means, that ſo their operation may better reach to the Brain; neither can things taken inwardly too much inflame the Brain being a part far diſtant, nor things outwardly applied, by reaſon of the thickneſs of the Head. The reſt found out by experience, are thought to reſtore the Memory by a certain propriety.

Thoſe things therefore which are taken chiefly to reſtore the Memory in a moiſt cauſe as was ſaid, are as follow.

In the form of *a Pouder* this is cried up to be excellent to preſerve the Memory: Take *of Male Frankincenſe* or *Olibanum, half a ſcruple: Make a Pouder*; Let him take it often by it ſelf or with *Wine* or ſome convenient *Water*.

If both *round* and *long Pepper* be added, tis a moſt commendable remedy thus prepared: Take *Male Frankincenſe, fifteen drams; Pepper, five drams:* Make a *Pouder*; give one dram every morning for forty daies.

Ginger condite in Syrup or *dry*, as tis wont to be prepared, taken in the morning is approved of; alſo the *conditure of the true Acorus, that is, the Aromatick Cane*.

Alſo *the Root of Pellitory of Spain*, whiles it is *new candid* eaten like *Ginger* is highly eſteemed, whoſe Decoction *Paracelſus* approves of againſt forgetfulneſs.

The Confection Anacardine was chiefly invented to repair the Memory, eſpecially if it be prepared without *Caſtor* by reaſon of its ungratefulneſs, as *Gordonius* teacheth, of which half an ounce or an ounce or more may be given according to *Gordonius* with ſome convenient *water* as of *Fennel* or *Smallage*, which if it heat the body too much may be prepared thus:

Take *of Confection Anacardine one dram, Conſerve of Marjoram, Roſemary, of each half an ounce:* Let him take once or twice a week a dram for a doſe.

Compounds of the aforementioned and other things convenient for the Head and appropriate to the memory impaired as *Myrobolans, Cyperus root, the Skul of a Man* and the like, are thus made for the ſtrengthning of the Brain.

Take *of confection anacardine one dram, Frankincenſe two drams, Pepper, Ginger, each half a dram; Sugar diſſolved in Cinnamon and Marjoram water* twelve ounces: make *Tables* give one every morning, or every other morning.

Others more efficacious are prepared thus. Take *of male Frankincenſe three drams, Pepper, Ginger each half a dram, Cinnamon two ſcruples Corall one dram, the ſhavings of Mans Skull two drams, Harts-horn, Ivory, each half a dram, ad of Sugar ſix ounces or the double quantity and make a pouder*; or diſſolving *the Sugar in Marjoram water* make *Tables*; or abate of the quantity of *Sugar*, and with the *Infuſion of Gum Tragacanth in Roſe-water* make *Lozenges*, and uſe them.

Electuaries alſo may be made for the ſame Uſe of things for the head after this manner. Take *of the conditures of Ginger, the true Acorus, Pellitory of Spain*, as was ſaid *each half an ounce, of Chebul and Emblick Myrobalans each two; of Marjoram, Roſemary-flowers, Lavender or French Lavender, Sage each ſix drams, conſerve of Roſes, Bugloſs each three drams, the Roots of Cyprus, Galangall, Cloves each half a dram, Pepper two ſcruples, Cubebs one ſcruple, Olibanum one dram and an half, pouder of Diamber and Diamoſchum each half a dram, (Muſk or Amber we may add) of a Mans Skul if you pleaſe, two drams, of Honey anacardine* as much as is ſufficient: make an *Electuary*. Let him take from one dram and an half to two drams going to Bed.

They commend alſo *Treacle and Methridate*, which we would rather omit by reaſon of the *Opium* which makes al the ſenſes more ſtupid or languid although the Compoſition be old; whenas other things are not wanting, and no pain here or Neceſſity requires it, neither is there any malignity of the Humor.

If we muſt needs uſe things unpleaſing it is beſt to give them in form of *Pills*. Take *of Frankincenſe two dram, Pepper, Ginger, Cubebs each one dram, Caſtor half a dram, Muſk, Amber each ſix grains, with the Confection or Honey anacardine* make *Pills*, give going to Bed two of them for many daies.

A Wine convenient for this may be made thus, Take *of the Roots of true Acorus, Galangall, each half an ounce; Ginger a dram and an half, the herbs Marjoram, Sage, the flowers of Lavender, French Lavender, Roſemary, Roſes, each three drams; Pepper, Cloves, Cubebs, of each half a dram;* Infuſe them bruiſed in *Wine*, let him drink ſomtimes a draught in a morning when he takes broath.

Diſtilled Waters are approved, the ſimple of *Roſemary flowers*, or the like, or compounded of divers, pouring to them the Water of Wine which they call *Aqua Vitæ* which they write (alſo alone) wil do good, if in the morn the quantity of one ſpoonful be taken.

A Compound one may be made thus. Take *of the Materials above mentioned for the Wine, bruiſed*, and pour to them *Spirits of Wine, or Malago wine that it may be above it one fingers breadth, Confection Anacardine ſix drams:* Let them be diſtilled in *Balneo Mariæ* and let him uſe it.

At meals, many of this ſort may be given, eſpecially the more grateful for Sauces, as the Spices forementioned, *Pepper, Ginger*, for ſtuffings, *Marjoram, Sage*, and the like.

Alſo *Muſtard ſeed* is a Junket with *Honey*, as 'tis wont to be preſented to Tables; or the ſame covered over with *Sugar*, becauſe this ſeed doth by a propriety whet the memory.

In *Wine* alſo the like *Herbs* may be infuſed and ſteeped.

The

The like *External Remedies* may be used, which may stir up the heat and consume moistures; as these are.

To rub the head in the morning with a Comb, and usually with cloaths after sleep: Sometimes to *wash* the head with a *Lie*, but presently again to dry it with warm cloaths smoaked with *Frankincense* seeing *Frankincense* as 'tis said, by a peculiar vertue helps the memory, but the *Lye* may be thus made. Take *of Agarick two drams, the herbs Sage, Betony, Marjoram, Celtick Spike, Pennyroyal, Bayes, Rosemary flowers, Spike, Lavender, Red Roses, Chamomel, of each one handful; Bay and Juniper berries, of each an ounce: Pepper one dram:* Let them be bruised and boyled in a *Barbers Lye made with water wherein Iron hath been quencht.*

Not only the hinder region of the Brain is anointed in the memory hurt, but also the whol Superficies of the head for the same, as take *of the Oyl of Mustard by expression*, anoint it.

It will be more effectual thus, Take, *of the Oyl of Bean, Elders, of each one ounce, Mustard seed, long Pepper, each one dram, Euphorbium, Castor, each one scruple, wax a little:* Make *a Liniment.*

There are some who *anoint the head, with Confection Anacardine, dissolved in spirits of wine.*

Quilts and Caps, also are worne night and day, of things that strengthen the head: of which in their place.

Amulets also do help, if not by their own virtue, at least waies by imagination, as *the tongue of a Lapwing* hanged about one, is thought by *Rhases* to take away forgetfulness: *The Amethist stone* worne about one, doth quicken all the senses, as one writes; and also that *the Beryll stone* worne doth cause a good understanding.

The Cure of Memory impaired by the driness of the Brain.

In a dry constitution of the brain, whence they say the memory is impaired, if the body be foul, it must be purged, as was said of *Melancholy*, whenas in pure bodies medicines applyed do more rightly operate.

Let it be moistned with *meats of good juyce* such as are described in the *Hectick and Melancholical.*

Let him abstain from all drying things, and immoderate evacuations, especially Venery, then which nothing is more hurtful.

He may use this *Electuary* at times. Take *of the Conserves of the flowers or Roots of Succory, Bugloss, Borrage, Violets, Maidenhair, Betony, each one ounce and an half; Of the ponder of Diatragacantium frigidum and Triasantalum each half a dram; with syrup of Violets make an Electuary:* Let him take the quantity of a Chesnut or one dram and an half: Or let him use these kind of *Tables.* Take *of the Flowers of Bugloss, Burrage, Violets of each one scruple, the leaves of Marjoram half a dram, male frankincense one dram, the Skul of a man burnt half a dram; with Sugar dissolved in Violet and Rose Water, make Tablets.*

The Topicks mentioned *in melancholly* must be applied to the head, especially this *Lotion* of the head and feet is very profitable. Take *of the Decoction of the Head and Feet of a Weather as much as is sufficient, adding the herbs Bugloss, Burrage, Violets with their flowers* (if they may be had) *flowers of Roses, Betony,* (for hot things must be mixt with cold: when we moisten, as was said in melancholy) *each one handful: Boyl them.*

This following also is good. Take *of the roots of Marshmallows half a pound, the herbs Betony Marjoram each one handful; flowers of Violets, Roses, Chamomel, Melilot, Lavender, each one pugil: Boyl them in milk, to wash the Head.*

Also such an *Unction* is commended, especially after the Lotion. Take *Oyl of sweet Almonds, Roses, each one ounce; the fat of a Drake half an ounce, one white of an Eg, Milk half an ounce;* stir them together for a *Liniment.*

Chap. 2. *Of a Consternation of the mind.*

The Kinds.

WE cal that *a Consternation of the mind* when the *Senses* either only *oppress* or almost wholly *taken away*, either they sleep after a *non-natural manner*, or are *Stupid*; and that either with a languishing and resolution of the body, or with an Agitation or Convulsion of it, or with a Rigidity or Stiffness; which four are the chief and highest Kinds of Consternation of mind, particularly here to be explained.

That is a *preternatural sleep* which lasts longer then a natural, and then 'tis called *immoderate*, and which doth more lull the Senses; and therefore 'tis called *profound*, somtimes too great a propension to sleep, or a very profound sleep happens to them that are *well*; at other times it befals them in *Diseases*, and somtimes without, somtimes with a Fever, somtimes also it invadeth with Ravings or with Stupidity.

Immoderate sleep.

Too great a propension to sleep in those otherwise *well*, is a frequent fault in some men; not when this befals certain natures by reason of their Age, as in Infants and old folks, 'tis accustomary and good; or by reason of the *Country* (in which 'tis natural for some to sleep night and day) but when it proceeds from a cause that ought not to be; whence not onely too long indulging to sleep by night, they rise late in the morning; but also by day time, especially presently after taking of meat, and chiefly in a hot place or season, they are so forced to sleep, that it is altogether necessary for them to sleep, to which some are so prone, that though they do no waies at all compose themselves to it, but do somwhat to shake it off, yet notwithstanding they fall asleep in that very work, and I have seen one of them, even when he drank at Table, and moved the cup to his mouth, in that posture fallen asleep; or doing somwhat else, he was wont to sleep in that form of body.

Profound sleep.

Profound sleep somtimes doth steal upon *sound men* after drinking of *Wine* in Drunkards, or some other *Narcotick* taken; which is not lasting if the use of them hath been gentle; but if more vehement, 'tis turned into a *Stupidity*, as shal be said there.

In a Disease heavy, sleep is called, *Caros, Coma, Cataphora, Lethargus, Veternus, Subeth*, in which as in that naturall, they sleep with their Eyes shut, and Body prostrate: but in that that the internall Sences, and by consequence the externall do not only rest, as in a naturall sleep, but are as it were overwhelm'd, they are more or less dulled, so that they can scarce or never be roused up, and being wakned, they complain of no Pain, onely that they feel their Head heavy and weighty, and so fall asleep again. The motion also of the body is more languid, yet not abolisht as in the *Apoplecticall* with a resolution of the Limbs, neither is their breathing hindred as in them, but free and easie, unless in some it be depraved with yawning and noise, their pulse also although it be weaker, yet it doth not cease as in a *Syncope.*

Sleepiness with a Fever is a Lethargie.

Sometimes a *Fever* is joyned with *Sleep* which if it begin together with this, it hath obtained the name of a *Lethargie*, which notwithstanding is common to the rest also, in which besides the signs of sleep, a preternatural heat of the body, a quick pulse, a

deep

deep dyed Urin, declare a Fever present: but also a *Caros* somtimes following a *Fever*, and is its Symptome.

Besides these Species of *Sleep*, there is one also found in which though there be the greatest propension to sleep, and they express the same by lying down with their Eyes shut, notwithstanding they watch, and divers shapes and apparitions are presented to them; or if they do sleep, they are troubled with divers horrible dreams, which afterwards when they awake they declare; who being forced do hardly lift up their Eyes, and look upon him that toucheth them, but know him not, aud though they do feel and are moved, yet they cannot rise out of the bed, and do the work of one awake; this they call a *Catophora* or a *sleepless Coma*; Some cal it a *Typhomania*, as it were an *astonisht madness*; neither may it unfitly be called a *Raving sleep* and be refer'd to *Delirations*, or a heavy sleep with terrible dreams: another Species of it is described; the common people call them *Exstatical*, as if they were taken with an *Extasie*.

Sleep with Deliration.

Hither also may be refer'd the *Demoniacal sleep* of Witches, in which they think that they are carried through the Air, feed deliciously, dance and lie with the Devil, and waking they continue in the same error.

Diabolical sleep.

I have seen another kind somwhat like to these, in a certain Baron who for a long time astonisht and sleepy, did nothing according to reason, he would ask for no meat, nor take it unless thrust in by force,; neither would he go to bed unless compel'd, but all day long leaning with his Arm on the Table, and with his eyes shut, he sate as one asleep; neither would he answer any thing unless asked and often admonisht, and then that which was little to the purpose.

Sleep with Stupidity.

A *Stupidity* with a Languidness or Resolution of the body is called *Obstupescentia*, *Ecplexis*, or an Apoplexy; and tis an affect in which they do not sleep, but astonisht they lie stupid like stocks, all the Sences alike, and motion also being abolisht together: which accidents are somtimes more mild, at other times more grievous, in which both the internal and external senses are taken away together, whence they have understanding of nothing; neither do they see, though some of them do seem to look upon a man with fixt eyes, neither do they hear a noise, neither do they show any sign of sence, though you prick them or burn them: Also being deprived of all motion of the body in a moment, they fall down, and all their members being resolved do languish: they neither speak nor swallow, breathing only remainiug, and that very obscurely, the blowing forth of which from the mouth or nostrils can somtimes hardly be discern'd, by the motion of a piece of Cotton applied to them, or the motion of the breast to detect that, by the motion of a cup of water placed on the breast; or the breath is drawn with a great deal of difficulty and noise, as in dying people; the pulse being in the interim full and strong in this difficulty of breathing, but discovering it self to be very unequal; and that so loug, till their Senses returning tthey come to themselves again, which happens in a gentler species of it; or if it be more grievous, they continue resolved; or if it be worst of all, their breath being wholly taken away they are by and by choaked, froth then flowing out of their mouth.

Stupidity with a resolution is an Apoplexy.

A *Stupidity* with a Convulsion or vehement agitation of body is called an *Epilepsie* and 'tis an disease in which all the Senses are suddenly taken away, and the whol body for a time is shaken and pulled with an inordniate motion, assailing a man by turns or fits, which because it doth suddenly apprehend one, hath the name of *Epilepsie*; because it puls him, the name of *Convulsion*, of which we meet with chiefly two different kinds, in as much as one is of Continuance, another Short.

A Stupidity with Convulsion is an Epilepsie.

The *Diuturnall* is that which lasts long, and whether it happen before the age of youth, and doth not leave them when that comes; or whether it begins first after that age, for the most part it assails the sick for the whole life time, somtimes at certain times, hours, daies, months, years, or changes of the Moon (whence 'tis also called the *Lunatick Disease*) whose Functions because it doth not suddenly destroy them, but only weakens them by degrees, therefore it comes to pass that when they are free from the fit, they can nevertheless go about their business, and because they fall, if they be taken with this evil, whiles they are about their business, hence also it is called the *Falling sickness*, and whenas their sudden fall, and horrid symptoms, are wont to strike a great terror, so that some from the apprehension of it only, have presently fallen into the same affect, and upon that account most men do fly the sight of them; and if it happen in a Congregation of people (as in our age in assembles) the company is dissolved, amongst the Ancients their meetings upon the same cause were dissolved, whence called by them the *Comitial Disease* which name it retains; which also by reason of its pertinacy, was called the *Great*, *Sonticke*, and *Herculean Disease*, and 'tis to this kind to which they have applied the name of *Epilepsie* rather than to the rest, when notwithstanding it agrees with them all.

The *Short* and not so continued *Convulsion* is which either presently ceases, or at leastwise is not protracted so long as the former, which again as 'tis either *Gentler* or *Worse* is divided into two Species

The *Gentler* though it be not free from danger, is accounted that, whose cause is neither great not perseverating; as that which happens to Infants, when their Teeth first break forth, or Worms disturb them, and by and by ceaseth: and that which befalls Virgins before their Courses flow, but they coming it remits: and that which betides great-bellied Women chiefly at the first month; but at the middle time of their going, or after the birth presently ends: This, that they might not bring fear by the dreadful name of the *Falling-sickness*, because it often happens in Child-hood, they call the *Childrens Disease*, mitigating the cruelty of the Disease by the smoothness of the name.

The *Worse* and highly dangerous Species is, which following grievous diseases, as Wounds, Fevers, pains of the Collick, and others, at any age, somtimes with one or two fits, somtimes with more, and that continual, or somtimes with intermitting accessions, doth perplex the Patiant with a terrible aspect, and for the most part kil him; or if he be helped, yet somtimes it leaves behind it the work of symptoms, as Contraction of the Limbs, hurts the Voice and Senses, or other discommodities; which Species they call a *Convulsion* or *Spasm* only, not an *Epilepsie*, when notwithstanding those affected with this Species, are no less suddenly taken in this case than the *Epileptical*, and cal that *general* to difference it from a *particular Convulsion* or *Spasm*: of which kind also there may be found, in the Senses being unhurt only some parts are convelled, we shall shew in the hurts of motion: But this Species if it happen to Children, as it is wont often to kill them, both Infants, and of riper years: they call it also the *Child-bed Disease*.

The accidents in all the Species of an *Epilepſie* both *continued* and *ſhort* do almoſt concur the ſame; and they may as well vary in all, as well thoſe which are obſerved in *the hurts of the ſenſes* as of *motion*.

For all the *Internal ſenſes* and by conſequence the *External* too, are aboliſht in all, the whol time they are poſſeſt with the fit, they underſtanding, judging or feeling nothing at all: wherefore they refrain not from violent motions though thereby they hurt themſelves; and after they come to themſelves, they remember none of thoſe things they have ſufferd, neither do they know that they have ſufferd this evil, unleſs they be told of it, or ſuſpect it, by taking ſome ſignal, from the marke of ſome hurt left behind, as a Wound or Contuſion.

All *Motion* alſo both voluntary which wholly depends on our power, and that which is performed by help of Nature, as breathing and evacuating; and that of the Pulſes which Nature alone performs, continuing in all theſe Species diſtinguiſheth the *Epileptical* from the *Apoplectick*, and *Syncopal* in whom theſe motions do fail (the Pulſe only remaining in the *Apoplectick*.) The which notwithſtanding being deprived in the *Convulſive*, doth cauſe that they fal, and uſe inordinate motions.

But they fall, not by reaſon of a privation of the ſenſes, but becauſe their whol Body at once and of a ſuddain is convelled; ſo that unleſs they be forewarned by a *Vertigo* which is wont ſomtimes to go before it, or being taught by *Cuſtome* of the fit at a day or hour, if it be wont to come at ſet times, they have a care of themſelves, being ſeazed with it whiles they are upright, they preſently fall down like to the *Apoplectick* and thoſe that fall into Swonings and as tis commonly ſaid are free neither from Water nor fire, but are in the greateſt jeopardy by danger of the fall: and if upon this account tis leſs danger for thoſe, who lying in their Bed by reaſon of ſome ſickneſs, cannot fall when the *Convulſions* come upon them, yet they are more hazarded by the cruelty of the Diſeaſe: So that every *Epilepſie* is horrible and abominable, which the ancients therefore called *the ſacred Diſeaſe* as ſent by the Gods by way of puniſhment, and others have Superſtitiouſly impoſed the Names of the Gods on it.

They alſo ſo ſtir their Body with inordinate motions. That oftentimes tis all of a fire, and the pulſe becomes more ſwift, and ſomtimes ſweats break forth. Wreathing and diſtorting their Back, Neck, Head Arms, Feet, into divers Figures, and with them beating and ſhaking every thing in the way as the Bed, Walls, Ground, bruiſing and wounding their own Limbs, gnaſhing with their Teeth ſet, and bitterly biting their Tongues if they be out, rowling their Eyes about, which being opened and very much drawn aſunder, as alſo the bending of the Face towards the hinder parts, do uſually give the firſt ſign of the fit aſſailing; which at length in the end of the fit, lying as men wearied and aſtoniſht, they keep fixt and ſterne, til they come to themſelves again.

Their breathing alſo is very unequal, whenas ſomtimes they hold it for a while ſo that from the ſtopping of their breath, and vehement ſtriving, they ſomtimes caſt forth their ordure and Urine, and ſeed to, eſpecially if it abound. But at other times they fetch their Breath with difficulty and noiſe, both when an *Epilepſie of the Womb* hath the ſaid *ſtrangulation* its companion and cauſe, and when Flegm falling upon the Jawes and Noſtrils hinders it; and they bring forth a froth at the Mouth and Noſe, ariſing from Flegm, confuſed and ſtirred there with the Air (which happens not to *the Apoplectick* and *Strangulated* unleſs they die, ſaith *Hippocrates*;) and oftentimes they make a noiſe with crying out.

But theſe accidents which we have related, as they come on a ſuddain, ſo the fit ceaſing they preſently remit: Yet ſomtimes certain relicks of them do remaine, and the ſenſes being yet weakned, they cannot rightly underſtand Reaſon, or remember any thing; or *an alienation of Minde* coming upon it, they do all things amiſs and blaſpheme, or they break forth into a great Laughter, perhaps that which *Cicero* calls *Sardonian*; and that till a new fit return, which is wont to attend theſe foretelling ſigns: but before and after theſe fits, ſome *particular convulſions* ſomtimes either went before or remain, as *a diſtortion of the Mouth, a difficulty of ſwallowing* or *a ſpaſme of ſome other parts* as ſhall be explained in its place; or *that Spaſme* which they call *Flatulent* which ſomtimes alſo threatens *Convulſions* if it be by reaſon of the Nerves as ſhall be ſaid; as alſo that *convulſive Palpitation* which alſo cauſed from an affect of the Nerves doth oftentimes along while forego an *Epilepſie* and remain ſtill in the Members after it, and exerciſe it ſelf: or other Symptomes of motions do ſomtimes trouble them, as with Geſticulations, ſomtimes Dancings or ſome other diſturbance of the Limbs, and tremblings of them.

A Stupidity with Rigidneſs of Body, is a rare and wonderful affect, which is called a *Catocha* or *Catalepſis*, that is, *a laying hold off*, which they cal alſo *a Congelation* whenas they are as ſtiff as if they were frozen: in which all the internal ſenſes and external are ſuddainly aboliſht; but only the motion of the Body is depraved, whenas they keep that form which the Body had before it was ſeazed on with this evil, whether Lying, Sitting, or Going, and being taken like a ſtatue they cannot change it, neither of their own accord nor by compulſion; and with their Eyes open, whence they have called it *the watchful Stupidity*, yet blind and altogether ſpeechleſs, breathing in the interim not taken away, or very much hindred nor the Pulſe.

A Stupidity with rigidneſs in a Catalepſis.

But it happens alſo in ſome, that though they lie rigid like a ſtock without motion and ſpeech, yet nevertheleſs they perceive thoſe things, which the ſtanders by do ſpeak off, and can afterwards relate them, which they have called *Ecſtatick*. But others remaining in the ſame ſtate like to dead Men, although they heard nothing, nor ſaw not, now being prickt ſet nothing, yet if any thing were put into their Mouth, they ſwallowed it, and being lift up do ſtand, being forced do walk, and keep their Members fixt in that poſture as they are bent for them. In a certain Woman thus taken, only the Belly and Breaſt were very much moved, all the reſt of the Body being ſtupid.

A Stupidity with hearing remaining.

A Stupidity with motion remaining.

The Cauſes.

In all the forementiond kinds *of Sleep and Stupidity with Languiſhing, Convulſion* or *Rigor* it muſt needs be that *the Brain* is affected whenas all motion and ſenſe proceed from that. Neither here as they would have it, are the Functions diverſely weakend, as the former, middle or hinder Ventricles of the Brain are hurt; nor as the Brain is affected before or behind, whenas the ſubſtance of the Brain doth on every part perform its Functions, but as it is more or leſs hurt, it looſeth more or fewer Functions. For if the hurt be great ſo affecting

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the Brain that all the ſenſes be aboliſht, then it muſt needs be that motion alſo doth ceaſe; other Functions in the interim remaining, which the Brain is not the cauſe of, as the Pulſe which the Heart yeids; and whenas the motion of breathing is partly Natural, partly Voluntary, and therefore doth proceed from the Or-Organs of both motions, both the Midrif and Lungs, tis no wonder, that that alſo, if the Brain be very much hurt, ſo that all Voluntary motion do ceaſe as it comes to paſs in *the Apoplectical* the Midrif or Muſcles of the Breaſt then contributing nothing to Motion, but the Lungs only after a ſort moving themſelves ſtil, and whils they are dilated and filled with Air, which they do by their prover Natural motion, a little lifting up the Breaſt) do a little while Perſevere, but very much hinderd and difficult, ſo that unleſs that hurt of the Brain do ſpeedily ceaſe, the Patient muſt needs be choaked breathing being wholly taken away; but when voluntary motion is not wholly taken away with the ſenſes, that then reſpiration doth remain ſtill more free. But if the Brain be affected with a leſs affect compared to the former, by which the ſenſes are only oppreſt as *in a ſleepineſs or gentle Stupidity*, then motion, though it do reſt a little by reaſon of *Sleep and Conſternation*, yet nevertheleſs it doth perſevere; or if this come to paſs only by reaſon of the ſpirits of the Brain only extravagant, as ſhall be ſaid in a *Convulſion* and *Catalepſis* that motion doth alſo continue, and they ſooner return to themſelves; as ſhall be explained how this comes to paſs, in the Particular cauſes from which theſe proceed. But the cauſes of all *Conſternation of Minde* that happen are, either *ſome affect ſo hurting the Brain* (which gives Senſe and Motion) *by it ſelf or by conſent that theſe its Functions do more or leſs* fail; as are *Diſtemper, Repletion from a flegmatick or ſanguine Humor: ſome eminent hurt; a Tumor, a diſtemper of the Brain proceeding from a Vapor or Malignant quality; or a defect of the Animal ſpirits of the Brain*; of all which cauſes and their effects we will now treat in Particular.

A cold Diſtemper, the Cauſe of Stupidity; a Moiſt, of immoderate Sleep.

A cold Diſtemper only without matter altering the Brain, becauſe it is wont to hurt the Functions, may make it *Stupid*. And if it be *Moiſt too*, which is ſeldom without matter, it may alſo cauſe *Immoderate Sleep*; as ſomtimes by Reaſon of *Age* or the continuance of a Diſeaſe, a diſtemper left in the Brain, doth make men perpetually Prone to Sleep or as it was ſaid *in the Weakneſs of the Minde* more dul; which we have taught doth happen rather by reaſon of Weakneſs then Coldneſs.

Or induced by other cauſes, eſpecially from *the cold external Air, the North Wind blowing, outwardly cooling the Head, or by the Pores piercing to the Brain*, it may cauſe a *great Stupidity*.

They write alſo that *a watchful Stupidity* or *Catalepſis* may ariſe from *a Cold and dry diſtemper congealing the Spirits*: but whenas the Spirits cannot be congealed, or if they could be, then a greater *Stupidity* would follow, we cannot at all allow of this.

That *Convulſions* are ſomtimes cauſed from *Dryneſs* which they call *Inanition* is a common opinion, which doth not happen in this *Convulſion*, but in a *Particular one* as we ſhall there explaine.

Flegm is very often the cauſe of *Sleep and Supidity* (under which Name we comprehend all the Watery, Cold and Moiſt Excrements of the Brain) which immoderately heaped up within the Skul (as the Brain doth ever and a non heap up ſuch things, from Flegmatick blood carried up to it, and the weakneſs of the part) if it be ſuppreſt and flow not forth through the paſſages appointed for it, then if it perfuſe the ſubſtance of the Brain with a large humor, and cool it, it cauſeth *a Carus*. Or if by its long impulſe it ſo moiſten the ſame, that that great bulk of the Brain becoming more ſoft and lax, do ſuddainly flow abroad and ſink and preſs the original of the Nerves at the baſis of the Skul proceeding from the Brain, and ſtop the paſſage of the Animal ſpirit, it procures *a grievous Apoplexy*. As when Flegm doth ſuddainly fill the Ventricles or Cavities of the Brain, not by obſtructing, whenas the Animal Spirit is not ſeated in them but every where in the ſubſtance of the Brain and Nerves, neither doth it paſs through the Ventricles but after the ſame manner by oppreſſing the baſis of the Brain, it may alſo induce an *Apoplexy*; the which notwithſtanding, if the humor deſcending from them, do follow the courſe of the Nerves, may end in *a Palſie*. That all theſe things are thus in *a Carus* and *Apoplexy* we have learnt from the dead, becauſe this humor hath ſomtimes flown from their mouths in a plentiful manner. And we have obſerved alſo by diligent diſſection, that the thick Membrane of the Brain open'd, in ſome abundance of Humor hath preſently lept forth, by the Region of the Head, and deſcended even to the Breaſt: and the very ſubſtance of the Brain in a certain *old Woman* which died of an *Apoplexy* diſſolved like to Cream, after the ſame manner hath run all over her Face. But we know that theſe affects proceeded from the Cauſe, by the precedent conſtitution of the Body, eſpecially in old Age, which is Obnoxious to this evil; and from a cold conſtitution of the ſeaſon and Air; and becauſe they have firſt complained of a heavineſs in the Head and a weight with ſluggiſhneſs, darkneſs of the ſight, and alſo of a want of that accuſtomary voiding of Flegm by the Noſe and Mouth: and becauſe in the dead, of *an Apoplexy* eſpecially, oft times a great quantity of Flegm flows forth by the ſaid paſſages.

From the ſame *Flegmatick Humor obſtructing the paſſages of the Brain*; many have written that as *an Apoplexy* ſo alſo *an Epilepſie* may be cauſed; and therefore as in that ſo in this, that all the ſenſes are aboliſht, but do preſently return again, becauſe the Brain by concuſſion, doth ſpeedily ſhake it of; and then that motion with the ſenſes doth no way ceaſe here, as is *an Apoplexy* becauſe the Ventricles are not altogether, but only in part, obſtructed, or as others will have it, the former only are obſtructed, the hindermoſt being unhurt, ſo that a portion of the Spirits may nevertheleſs paſs by to the Nerves. Which though it may be condemned for many things, yet let it ſuffice to have brought this eſpecially to deſtroy this opinion; *viz.* that if a ſufficient quantity of the Animal Spirits did not deſcend, the Functions of the Brain would rather follow to be impared in ſenſe and motion, then partly aboliſht, partly depraved; and that if Flegm were the cauſe, and that ſuddainly ſhaken of from the Brain did flow down, it would induce that *Palſie* which is wont to follow *an Apoplexy* for the ſame Reaſon.

They teach *that Flegm putrifying in the Brain*, doth Cauſe *a Lethargie*, and *a Feaver its companion* is kindled from thence: but whenas we have ſhewed in *Feavers* that from the Putrefaction of Flegm eſpecially in the Head, that *a Feaver* can in no wiſe be kindled; and we find no reaſon, how the ſame Flegmatick Humor being putrified, by its coldneſs can cauſe *a Carus*, and by its heat *a Feaver*, and one and the ſame thing can be cold and hot, when as contraries are inconſiſtent in the ſame ſubject; we ſhall aſſign a far different cauſe of *a Lethargie* by and by when we treat of *a Carus cauſed by*

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consent, and that not much different, from the *Carus* which follows *Fevers*.

They teach also that *flegm not simply but mixt with choler*, doth cause *a watchful stupidity* or *Catalepsis* for this reason, *Fleam* causeth *Sleep*, *Choler*, *Watchings*, and so from the mixture of contrary causes are produced contrary effects; which indeed might be, if they were in divers places, but two contraries mixt and confounded in the same subject, do produce a certain middle effect, or rather one compounded of them both, than contrary: for which reason, these causes were found out rather from the effect, than their certain signs, that they might shew by what means at the same time, a man might be stupid and watchful (not sleeep, since 'tis impossible to sleep and watch at the same time) and attribute to each its proper humors.

Blood the cause of a Carus and Apoplexy.

Blood also *continued as yet in the ventricles of the brain*, as there is at other times a great *quantity* of it there, so it *abounding* more yet, if it be *more crude*, *serous*, *cold*, *by oppressing the brain* may make it *more stupid*, or *by cooling it*, may make it *sleepy*: The which doubless a pain of the head præceded, and somtimes doth still remain its companion, and this is known by a fulness of blood and redness of the face.

Ætius tels us that *from much blood abundantly and suddenly overwhelming the substance of the Brain*, that Species of a *Catalepsis* is generated, from which a yong man was freed by a flux of blood from his nose; which flux of blood being often accustomary in solution of Diseases by natures motion, cannot therefore argue this Disease proceeding from blood, for which we shal propound another cause; as we can neither grant that lighter species of it, called an *Aphony* when the voice only is intercepted, to proceed from a fulness of blood intercepting the passage of the animal spirit, as *Hollerius* writes, for which we shal by and by alleadg another cause. Neither can we allow that an *Epilepsie* which some also have delivered from *plenty of blood possessing the Ventricles of the Brain, and obstructing the passages of the spirits*, doth arise from this humor and after this manner. As neither from *Blood* or a *melancholly* or *Cholerick juyce* from which some teach, that species of a *Catalepsis* is generated, which is wont to happen to persons melancholical: and by reason of the *coldness* and *drines* of that humor the spirits to be so congealed, as was said in the like distemper, which we have denied to be for that reason, and from *Melancholly* we have thought to proceed melancholly accidents rather than those of a *Catalepsis* unless some other cause be joyned, as shall be said; neither can we by any means admit an *Epilepsie* also to arise from the same *obstructing the Ventricles* as some have spred abroad these opinions: when as the aforementioned affects as lasting no longer, but seazing and ceasing by course have no fixt cause in the Brain, but happen, that being affected only by consent, as shal afterwards be declared.

The Blood carried out of the Vessels, if infused into the substance of the Brain, it breeds not an Inflammation, and then a Phrensie would follow, but it obstruct the *Windings and Ventricles by suddenly filling of them*, and it oppress *the beginning of the Nerves* then it causeth a *Stupidity* and *Apoplexy*: as it often happens a Vein being broke, and that somtimes by reason of a fulness of the Vessels, especially in those in whom some accustomary Hæmorrhages of the Courses, Hæmrods or Nose are stopt: in whom yet living, and after their death, I have observed that a great quantity of blood hath broken forth from their mouth and nose, that somtimes I have perswaded my self, that this was the chief cause of an *Apoplexy*. The same may happen from *an external violent cause*, as a *Contusion of the Brain* from a *Blow* or *Fall* although the *substance of the Brain be no wayes wounded* that the blood also may fil up the Cavities of the Brain, and its substance, in those places especially where it is comused; as Women do daily see comes to pass in the Brain of Buls killed with a Hatchet, whenas they first purge the Brain from the clotted blood, before they boyl it; from whence it must needs be that an *Apoplexy* doth suddenly arise unless the blood presently break forth by the Nostrils, Ears and other parts or adjoyning passages, as sometimes also it doth; or if the fall be lighter, there follows rather *a lighter obstupulescency*: though oftentimes also *the flux of blood turned into clots and retained a long time if it putrifie* it causeth a *Phrenzy*, *Convulsions* which before death do follow *Lethargies* and *Apoplexies* and kill the Patient.

But also from the same *violent external cause*, if the substance of the Brain be hurt, *by Contusion, or by cutting or pricking*, seeing it is a principal part, whose action is then destroyed, it must needs be that an *Apoplexy* doth suddenly follow. Or if the *Skull* be only *broken* thereby or *depress* so that it press the *Brain lying under it*, it happens also that a *Stupidity* doth follow. Or if from *some stronger force the bulk of Brain* rush together and press the beginning of the *Nerves*, an *Apoplexy* likewise follows; all which are made manifest from the causes foregoing.

A hurt of the Brain is the cause of a Stupidity & Apoplexy.

A *hard preternatural Tumor, affecting* rather by its *weight*, than *distemper* causeth a *Stupidity by degrees ingendred with the Tumor*, but of *long continuance*: which is hardly discovered till after death the Skull being opened, as was found in Noble *Bonecourtius* who for some years like to one astonisht as was said before, lay Stupid; viz. a great hard Glandule being generated over a callous body with plenty of humor, which warring the Brain, did cause a sleepiness joyned with a Stupidity, as we have formerly expounded this kind. The cause of which might be a blow with which he was struck on the head, although it were done a long time before he fel into the disease; but they being ignorant also of the true causes of a *Catalepsis*, phancying many other besides those above mentioned, they have thought also that it might proceed from a *Tumor of the Brain*. And some also have writ that a *Lethargie* doth proced from a *flegmatick Imposthumation*; the which whenas we have formerly shewed, that a *Fever* could not be caused from any cause lying in the brain, the same we assert cannot happen here: and some also have held that an *Abcess* may be the cause of it, the which notwithstanding generated in the brain from hot humors, doth cause rather a *Phrensie* and *Convulsions* than a *Lethargy*

A Tumor of the Brain is the cause of a Stupidity and Apoplexy.

A *Vapor carried up to the Brain, or heaped up there*, may be the cause of *immoderate sleep caused by consent* if it be carried thither *plentiful and steeming do oppress the spirits*, or *being crude it do somoisten the brain*, that it becomes *languid to perform its actions*.

A Vapor the cause of sleep.

Such a one is raised from plenty of Meat or drink, or from that which is vaporous or more moist; which if they be more moderete, procure that sleep which is wont to molest men after dinner or supper, especially if they drink Wine as 'tis usually the custom, which we shal by and by shew hath certain narcotick vertue, and the constitution of the brain be moist, as it is in old folks which propension to sleep is customary after meat, the rest

rest of the body also doth very much further, which after labor whiles they take their repast, is compleated by sitting stil, and so much the more also inviting the mind to rest by sleep by how much they are longer at dinner or supper, and if the heat of a South Sun be joyned, or of the Country or place as of a hot-house, it helps somwhat, both becaus heat cals the vapors upwards, and becaus recreating the wearied bodies, and more aptly disposing them to quiet, it causeth that the mind also is inclined to rest. But *immoderate Sleep* also may be caused from the *immoderate use of meat and drink* or *certain nourishments* not *dulling the brain by a stupefactive quality*, but *filling of it with many vapors*: which is known by this, if after carrousing though not to drunkennes, of which hereafter, or after the use of certain meats, they suffer thus, and afterwards come to themselves.

A Vapor the cause of deep sleep.

Vapors raised up and and down the body from humors and vaporus and moist excrements are somtimes wont to beget *sleep*. If they be gathered together in the Stomach or Womb, whence many other diseases of the brain caused by consent do proceed, and somtimes also they induce *immoderate sleep*, *if the brain be troubled with those vapors* which is easily known by the affects of those parts, that it proceeds from thence, *from Worms putrifying* in the Guts, such *evaporations sent to the head* do often cause *sleep* especially in Infants: and by the signs of Worms 'tis shewn from whence it proceeds although this *sleep* is commonly promoted by reason of a *Fever* accompanying.

A Vapor the cause of a Carus and Lethargie in Fevers.

The matter intermitting Feavers putrifying in the mesaraick Veins as the most capacious receptacle of humors corrupting for a light cause by reason of the neerness of the Guts, and the most dangerous fuel of many diseases, *being attenuated by heat and carried plentifully up to the head* cespecially at the first invasion, breeds this Sleep hapning in some Tertians and Quartans at the beginning of the fit, while coldnes yet possesseth them, and the body is not yet through hot, and somtimes it lasteth to the end of the fit. And also *in continual Fevers* I have often observed that *the Brain weaken'd with a long continued and grievous pain foregoing* in *the vigor* or *after it*, being struck with a *Carus* following, hath brought the Patient into a great deal of danger. The which also if it happen in the beginning of *continual Fevers* and by and by, by reason of too much evaporation, this principal part the brain, especially by some means disposed to a *Carus*, be so weakened, that *a heavy sleep* do follow, it wil be *that Lethargie which is coupled with a continual Fever* and presently after invades with it, no otherwise differing from that other *Carus* which happens in the declination of Fevers, which is also dangerous, but in this that it presently begins with the *Fever*.

Many assert that *from evaporations from the Stomach, Womb, and the rest of the body assailing the brain, an Epilepsy by consent is caused*: as also some have written that some species of a *Catalepsis* doth proceed from *Melancholly vapors*, and how it is done they variously assign, whenas some of them think it is done by filling up the Ventricles of the brain, or affecting it some other way, or by irritation; the which notwithstanding how it comes to pass by reason of the nervous kind affected, we shal by and by explain.

Somtimes an *occult quality by an unknown propriety* is wont to be the cause of *Sleep* and *Stupidity* of which kind is the *narcotick* vertue, which acts not by coldnes as hath hitherto been beleeved, but by that propriety by which it lulls asleep the senses, and by such medicines taken and entring into the body (although by their smell also they may offend somwhat, but being only applied they scarce work

A Narcotick vertue is the cause of sleep and stupidity

so far as to induce a *Stupidity*) if they be gentler they cause a *sleep* not natural but as it were *artificial*; but if it work more powerfully stronger things being given, it makes them so stupid, that like to the *Apoplectical* they lie without sense and motion, and unless they come to themselves they are choaked for want of breath; as we have often found hath hapen'd from *the juyce of Poppy* and other things, upon which account their use is very dangerous; and also from *the immoderate use of Wine*; not by reason of the evaporations as some have thought, but *by reason of its narcotick vertue*, *immoderate sleep and stupidity* also do follow in Drunkards, which makes them no less astonisht, than if they had taken *Opium* and often kils them: as it happens also from *the Liquor extracted from Wine* which they call *the Spirit of Wine*, and by so much the more powerful, as its force is reduced and collected into a narrower compass, by the drinking of which we have seen killed some Infants that drink of it by chance, and some of riper age lying astonisht.

A poysonous quality is the cause of sleep and stupidity

Some *venemous things* do cause the same effects by *a hidden vertue*, *being outwardly infer'd*, by a *stroke* of certain *Beasts*, as from *the biting of the Asp a deadly sleep* follows, as *Plutarch* writes in the death of *Cleopatra* which kind of *malignant vertue* may be raised also *in the body* from *the humors degenerating into a poysonous quality*: *in malignant and pestilent Fevers*, *by whose evaporations the brain infected*, may be oppresst with *a heavy sleep and Lethargie* which happens also in an *Epilepsie* proceeding from thence, towards the end of the fit, that they are longer oppresst than with *sleep* or *stupidness*; not so much by reason of the brain tired by too much stirring, as becaus these malignant vapors which before did cause those *Epileptical* motions by affecting the nervous parts, as shal be said by and by, afterwards weakning the brain do induce a *sleep* or *stupidness* for a while, til these vapors are discust, and the fit be ended: which also may happen in a *Catalepsis* for the like reason, since that it is a certain species of *Convulsion*.

The Devil the cause of Dæmonical sleep.

If the cause of that doting *sleep* proceed from the *Devil* with which *he* deludes *Witches* 'tis not our task to search out those hidden causes, which the Witches attribute to *the oyntments* with which they anoint things, by the Devils command, or *to Decoctions* with which they dream they can cause Hail, and draw Clouds from Heaven: such as *Eotis* in *Apuleius* and *Homers Circe* did prepare *by bruising together Garlick Wild Time and stinking Plants* which we renounce.

By reason of a defect of animal spirits in the brain, it must needs be also that a *stupidity* follow, *the functions of the brain being taken away*; which may happen upon a double account, they being either *wasted* or at leastwise *poured forth and extravagant*.

The Consumption of the animal spirit is cause of an Apoplexy.

The Animal spirits being wasted in the brain, if they were only impaired or too few whence follows a weakness of the brain, its functions also must be weakned, as hath been said *in the Weakness of the mind*: but if they be *altogether*, or *so far consumed* as that not only *a weakness of the functions* do follow, but *a total Oblition* of them, there wil be *a grievous Apoplexy and suddenly killing the Patient*, of which we have oftentimes seen old men die of, and the com-

mon People ſtill hath believed it cauſed from a Flegmatick Humor; as we ſee *the vital Spirit being impared* there follows *a want of ſtrength, but being wholly conſumed Death.*

Too great a pouring forth of the Animal Spirit from the Brain into the Nerves is the cauſe of a Stupidity of divers kinds of a Catalepſis and Epilepſie.

The Animal Spirits being ſhed or poured forth from the Brain into the Nerves continuous with the Brain (for they can be extravagant no where elſe, whenas they can conſiſt no where but in the Brain and Nerves) then it happens that the *Internal ſenſe*, either *all* or *ſome* do ceaſe, according as a greater or leſs quantity of them leaves the Brain; but the motive power is no waies aboliſht, ſince as thoſe Spirits do yet perſiſt in the Nerves, neither are the Nerves left deſtitute of them, as it comes to paſs in *a reſolution*, their paſſage from the Brain to the Nerves being then hinderd: furthermore ſince that the Animal ſpirit is contained alſo in the Nerves, as well as in the Brain, of which they are portions, though the the Functions of the Brain may ceaſe for a while, yet they nevertheleſs may ſtill for a time exerciſe the power of moving, which they contain in themſelves: the which alſo we may very well gueſs doth proceed rather from the Nerves, then the Brain in ſome creatures, who excel more in motion then in the ſenſes, becauſe they have none or a very little Brain, but a marrow of the Back, large and plentiful, part of which alſo cut off from the reſt, yet nevertheleſs moves for a while: and this is the true and Legitimate cauſe, why the ſenſes being aboliſht, yet motion nevertheleſs may perſiſt for a time: in finding out of which both the ancient and moderne Phyſitians have ſo much tormented themſelves, and deliverd their far different opinions, viz. *This effuſion of the Spirits into the Nerves:* which proceeding chiefly from *two cauſes* produceth accidents ſomwhat diverſe, as ſhall preſently be explained.

The firſt of which is *the too much, Vehement, and Perſevering operation of the internal Senſes* by which, as in great paſſions of the Heart, we ſee the vital Spirits ſo carried forth, that thence follows *a Fainting away:* and ſo if there be a diſſipation of the Animal Spirits into the Organs of the external ſenſes by a more vehement Cogitation and intention upon ſome thing, it may come to paſs that as men aſtoniſht they may be lightly ſtupid, and either by and by, they returning again they may come to themſelves, or if they continue longer, thoſe diverſe Species of *a Catalepſis* may proceed, which we have demonſtrated in the explication of the former kinds, to have ſomtimes happen'd from *too much Study*, or *Love*, or *ſome other great affects of the Minde*, eſpecially *Melancholly* (whence it came to paſs that many have put *a Melancholly juyce* as the Cauſe of *a Catalepſis*) In which if the Spirits being not wholly poured forth, ſome portions of them remain in the Brain, ſome Sences alſo wil remain, the other ceaſing, and as they are poured forth into the Nerves, Motion may alſo either at leaſt remain, or exerciſe it ſelf with a rigidneſs without concuſſion, if there be no contraction of the nerves as ſhal be ſaid in an *Epilepſie* and this ſeems very likely to be the cauſe of the diverſity of Species of a *Catalepſis* as we have ſhewed formerly in diverſe Hiſtories of it, yet as alſo if the ſpirits be ſo carried forth, by a violent affect of the Minde, that for awhile they cannot recollect themſelves, we have ſeen them fal down like to the *Epileptical* their pulſe remaining, by which they were diſtinguiſht from *thoſe that faint away* and ſome when they made a ſpeech or deſpute at great meetings, by reaſon of the too great contention of the Minde and Senſes, fear ſomtimes or ſhame coming upon them, the Spirits being troubled, have ſufferd the like; from whence perhaps becauſe the ſame was wont to happen for this reaſon at ſome meetings, *an Epilepſie* was called the *Comitial Diſeaſe*. In which vehement motions of the Minde as it may come to paſs, ſo it is commonly believed alſo that from *Anger Convulſions* may eaſily proceed; which opinion happily had its riſe, becauſe in thoſe diſpoſed, the fit is by this means promoted: unleſs perhaps this may happen by the ſtirring of Choller through Anger, as we ſhal declare by and by.

But the other and more frequent Cauſe of pouring out the Spirit into the Nerves, from whence follow *the more grievous Symptoms of an Epilepſie and Catalepſis is an irritation of the Brain:* ſuch a one by which its expulſive faculty ſtirred up, riſing to caſt of that which is troubleſome to it, doth together drive forth the Spirits: as Nature every where feeling pain and trouble is wont to thruſt Spirits thither, and together with them blood alſo, oftentimes ſo powerfully that there follows an inflamation of that part which receives them.

Which trouble or irritation of the Brain indeed, they demonſtrate to happen *rather by conſent, and compaſſion with ſome part* then from *its proper effect*; becauſe we ſee Convulſions happen rather from *an affect and Diſeaſe of another part*. Somtimes alſo far diſtant from the Brain, then of the Brain it ſelf, as from *a Nerve Prickt, or ſome violent Medicine taken:* where as if it did happen from ſome grievous Diſeaſe of the Brain (as indeed it muſt needs be a grievous Diſeaſe, which muſt induce ſo vehement a Symptone) the accidents of *Convulſions* which it cauſeth, would not ſo ſoon remit; as alſo in other hurts of this principal part, we ſee there ſucceeds long continued and laſting ſymptoms as you ſee in *an Apoplexy:* and thoſe affects which happning to the Nerves do cauſe *Convulſions* as a *Punkture Inflamation* if they were in the Brain would not cauſe them, but *an Apoplexy* and *Phrenſie:* although the Brain thus moleſted by conſent alſo, if the cauſe offending be great, and follow continually, not only irritating the Brain it ſelf, but alſo by its vehemency and frequency ſo hurting it, that it contract alſo its proper diſeaſe, then the contention of *Convulſions* laſts almoſt continually, neither do the ſick exactly come any more to themſelves, or the fit wholly ceaſe, till the Patient be quite dead. Yet it may be alſo that from *the ſame Cauſe* as we ſhall by and by ſpeak of that which is *Poyſenous, both the Nervous kind and the Brain hurt together, Convulſions* may happen *coupled together* with *other hurts of the Minde*,

But that we may find out this part which is firſt affected, and with which the Brain condoles, if we conſider the Symptoms, *viz.* the inordinate motion and privation of ſenſes, that muſt be it which hath ſo great conſent with the Muſcles exerciſing voluntary motion, and with the Brain communicating ſenſes, that that being hurt, the Muſcles are forced and the Brain ceaſeth a while from its Function which we ſay is *that Nervous kind becauſe it proceeds from the Brain and ends in the Muſcles*, under which Name we underſtand all the Nerves of the whol Body both within and without the Skul, eſpecially thoſe endued with the ſenſe of feeling and the Nervous parts which are compounded of them, which are of moſt exquiſite ſenſe: the which being ſo hurt, that the Functions of the Brain are aboliſht by ſympathy and thoſe of the Muſcles augmented, it muſt needs be that *Convulſions* follow; which how it comes to paſs we will Explain.

The offence of the Nervous kind, not that which weakens its Functions, but that which by bringing trouble to it doth rather ſtir up its faculty, if it be cauſed either in one place or more, a Nerve or Nervous part

is

is affected; and if the offense be great, then the whol nervous kind rising up, whiles it endeavors to shake off that with which tis offended, doth together exagitate the Brain from whence it proceeds, and draws it into consent, so that that also feeling these affects of the Nerves whiles it endeavors to help them to expell the trouble, driving the animall Spirits from it self into the beginning of the Nerves, tis a while left destitute of its Functions: no otherwise then we observe somtimes in *a Syncope* that the Heart without any proper affect of its own, the Spirits wandring for some other cause, doth cease from its Function til they return again. In which effusion of the Spirits into the Nerves, it happens that the motive Power doth continue in them, not only as was declared formerly, by also by reason of the plenty of Spirits of the Nerves, the Muscles also are stirred up to exercise Motion; but cheifly that inordinate and violent Motion in the beginning of Epileptical Fits is performed for this cause, that whiles the nervous kind doth endeavour to expell this Offense, it is contracted into it self, and then again dilated, and it forceth the Muscles of the whol Body, into whose beginnings the Nerves are inserted, by consecution to commit those inordinate Motions, by pulling or drawing, and then remitting them; and that so long till the hurtfull Matter is expel'd from them, or by reason of dejection of strength and as it were wearines, when they can no longer exercise Motion, yet notwithstanding they retain their Limbes convulsed or attracted, stiff and fixt for a while, till at last they come wholly to themselves. The which happens in a *Catalepsie* presently at the beginning, no agitation of the Body foregoing, perhaps because in that there is not so great an effusion of Spirits into the nerves, whenas in that somtimes some senses do yet remain, and there is a less irritation of the Nerves, whence it may be accounted a certain lighter sort of *Epilepsie*, yet very seldom happning, otherwise proceeding from the same cause which breeds an *Epilepsie*, but which either doth less affect the nervous kind by irritation or else hath that propriety, that it produces that *stupidity or rigidnesi of the Members* rather then *Convulsions*.

But that these causes of offense to the Nervous kind, from whence *an Epilepsie* often proceeds, *a Catalepsis* more seldom, are diverse and frequent it is no wonder, whenas the Nerves by reason of their most exquisite sense, are not only unable to endure great troubles or pains, but also are so easily offended by the slightest, that they cannot suffer the touch of a Body, (on which account, whiles they are carried in the body, Nature hath provided for them that they touch not the bones, neither are they joyned to any other parts, besides those into which they are inserted) from which notwithstanding they are not exasperated by divers incursions; unless they be great and violent, so that they be convulsed; of which sort are those which may happen to them from *a wound, irritation or infection* either acting singly, or more of them together.

That a *Convulsion* may be caused from *a Wound made either in a Nerve, or nervous part* such cases frequently hapning, do sufficiently declare; yet not from every wound of a Nerve, but only from that almost, by which *a Nerve* is hurt *by pricking*, *Convulsions* are wont to follow its function, being there stirred up by reason of the offence, which if the Nerve be wholly cut in two, is rather abolisht; for which reason also, if we cut off a Nerve convulsed, we cure *the Convulsion* caused in it; but this molestation of the Nerve, proceeding from the solution of its continuity, is yet more increased by *an Inflammation*, or *putrefaction* from the corruption retained in the narrow hole of the Puncture of the Nerve, and by the great *pain* from thence, which for the most part do attend this affect: or if *the Wound happen from Iron* of its own Nature *an enemy* to the Nerves, commonly by reason of *its Rust*, or because tis *infected*; or *a bite* or *blow of a poysonous Beast*.

But also *a nervous part being wounded* especially in that *place, where the Nerves go under it, and constitute the greater part* of it; as *the Bladder being hurt at the Neck, the Muscles about their beginnings* either *by chance* or *whiles the Chirurgion and lithotomist attempt a Section of the Body*, most commonly *dangerous Convulsions* succeed; which *a difficulty of swallowing* going before (which the Chirurgions so greatly fear, calling of it as was said before, *a spasme of the Stomach*) is wont most commonly to foretell.

An irritation of the nervous Kind, if it be *vehement*, may also cause *Convulsions*: the which proceeds either from *the cause* which because it torments *the Nerves with grievous pain*, maketh *Convulsions by accident*, or the which *by it self stimulating the Nerves by a manifest Quality*, and causing *Pain* or none together with it, doth convell them: which *cause* proceeds either *from Medicines* or internall *Humors* as *Blood, Choler and Flegm* molesting the Nerves by their proper substance, or by a Vapor only.

But Convulsions are cheifly caused by occasion *of pain*, either if *the Torments be unreasonable and of long continuace* such as in *Cholicks* do often cause *Convulsions*, or if they trouble Bodies endued with most exquisite sense and which by reason of their Tenderness, do hardly undergo such torments: on which account also Infants, not only in diverse sorts of sicknesses, but when they begin to breed Teeth, being exasperated with pains, are often times convulsive: and also *immoderate Tickling* made in the like Bodies, because that also gives trouble and a sad sence, experience doth testifie hath caused *Convulsions* in some; nay tis confest by all that even a *light Tickling* caused *by Wormes* creeping up and down the Gutts and Stomach, and sucking them with their Mouths, doth move in Infants not only horrors, and scratching of the Nose, but also *light epilepticall Convulsions*.

Medicines taken which stimulates the expulsive Faculty of the stomach and Guts, if they excite those parts too much, as they cause *a convulsive Motion* which is *by Hiccoping*; so if they be very biting and burning, as those things put up into the Nose, they move Sneezing; and so a *purging Faculty* especially joyned to them, by which they sollicite Nature at once very much both by Vomit and stool, by reason of their eminent efficacy they often produce *Convulsions*, such as happen from *Hellebore* and the use of other things; and those *deadly too* if by too much insinuating themselves into thee parts, they cease not to exagitate them: but *not yet deadly* if when they first begin to sollicite Nature, being repulsed by her, they be cast forth upwards and downwards: as I have observed from the use *of Antimony and Asarabacca* some feeling only forerunings of *a Spasme in their Thighes* but others also *convulsive*, to have returned to themselves.

Corrupt and putrifying Blood if it be carried into *the nervous kind* by affecting of them, may also cause *Convulsions*. As it sometimes happens from *a blow of the Head* penetrating the Skull, yet not deviding the substance of the Brain (whence rather an Apoplexy would follow) but only wounding the Membranes of the Brain: the Blood then being poured forth, and retained under the Skull, which putrefying infects the Membranes of the Brain with a maligne quality, by consent of which and also that sinking, and possessing and affecting the beginning of the Nerves produced from the Basis of the Brain, it breeds *Convulsions* which follow *Wounds of the Head*,

Head: which sort of *Convulsions* also in Impostumations, are somtimes wont to follow a *Phrenzie* that went before.

Choler of all humors is wont to be the chief, both the *Yellow*, and the *Green* and *Black*, which by its acrimony is wont to stimulate and irritate *the Nerves and nervous parts* the which also by its thinness it easily enters: which in *Pains of the Colick* doth cause those *Convulsions*, not only because it breeds these Torments, but also because insinuating it self into the Stomach and Guts, it doth too much sollicit them with a kind of *caustick* vertue, which Convulsions last, as long as this acrid humor ceases not to irritate; that there is no need to fancy any other reason that it is far fetcht to the Nerves, if it ought to cause *Convulsions*: and also if a *Convulsion* proceed from anger, they think it may happen by reason of the boyling and effusion of Choler, although that rather proceed, from this too much motion of the mind, stirring up the spirits as was said before.

Also from *thin salt and acrid flegm* falling down *from the brain into the spaces through which the Nerves are carried* and pulling of them, an *Epilepsie* may be caused; as in a *Palsie* somtimes bedewing the Nerves, it first causeth *Resolutions*, afterwards by its acrimony, which it either had before, or by putrefaction hath newly acquired, soliciting the Nerves, it raiseth those *Convulsions* which somtimes follow *Palsies*; which, *sneezing* arising, from the same flegm, distilled also from the Brain into the Nose, is wont to go before and foretell; whence perhaps the custom of praying after sneezing took its first rise, whenas they had somtimes observed that *sneezing* was a forerunner of an *Epilepsie*.

Also *filthy and acrid vapors* especially if some *malignity* be joyned, as shal be said, *being raised in the body* and especially *pulling the beginning of the Nerves* or else where solliciting, especially the greater, do beget an *Epilepsie* which they say is caused *by consent* such as are from vitious, corrupt and putrid meats, humors, excrements, worms, collected in the stomach, guts, womb, veins, in divers diseases of those parts, or of the whol body as those raised *from Fevers* which do produce *Convulsions* which are wont to follow these diseases.

But those things which cause *Convulsions by a poysonous and pernicious quality* are *various*; which according to the divers nature *of the poysons*, and as they are either inimicous only to the nervous kind, they do infect that only, or also the brain together with that, do produce either *Convulsions* or the brain being hurt also other accidents, which somtimes also *after the Epileptical fit is over* do continue in *the hurts of the senses*, especially in *an alienation of mind and depraved motion*, as hath been said. Amongst which poysonous causes that somtimes also offers it self, which by its propriety and private hurt brings forth the accidents of a *Catalepsis* rather than of a true *Convulsion*; yet because 'tis a disease very rare, it evidently shews, that seldom such a venenate quality, is raised in our body, which may produce such an effect in the body, as also that which causeth *true Convulsions* is most often: but of what kind soever that be, its *Fountain* and *Original* somtimes lurks *intrinsecally in the brain, or bowels, or in the veins or habit of the body* and sometimes *extrinsecally to the body*.

Fernelius witnesseth that he hath found by dissection, *an Epilepsie of long continuance* caused in the *Brain* from the *corruption* or *impostumation of the membranes of the brain* and by reason that *a filthy vapor* raised from them, at set times entring the ventricles did cause the fits; but that these things do cause rather *short* and *deadly* than *long continued Epilepsies* and not because they send a filthy vapor to the Ventricles, but for another reason, hath been demonstrated formerly, whenas if they did possess the substance of the brain or its Ventricles and so much hurt them, they would induce rather an *Apoplexy* than *Convulsions*. In the interim notwithstanding we do no waies deny the cause of an *Epilepsie* oftentimes to lie in the head; and we confess we meet with many faults within the Skul, both in the membranes of the brain, and in its substance also, or in its humors, which raging with their poysonous and adverse quality at set times as the nature of the poyson is, by soliciting the membranes and nervous kind, do cause that *long continued Epilepsie* and almost incurable. Yet the nature of which cause as also of other poysons, we can no otherwise know, then as by dissection made, somtimes a *Speck* is discovered, somtimes some *humor black* or *frothy* in some *inward part of the Skul* or *bone* or *membrane* or *brain*, but somtimes nothing at all; but that 'tis a poysonous faculty we collect from this, because it is not with a manifest cause, or of such moment, nevertheless produces such horrid symptomes, and yet in the interim doth not kil the man, nor yeilds to no Remedies.

And also this *poysonous* cause lying in the *bowels* produceth the like *long continued* and *pertinacious Epilepsies*; as *poysons* taken in the *Stomach* and *Guts* which have some propriety of begetting an *Epilepsie*: or *meat* changed into the *nature of poyson* or *excrements* putting on a *venenate quality* conteined in those places, or also in the *Womb* as they would have it. Of all which that these are the causes and do lie in the veins is judged and known from the affects concurring with them, as hath been said, or from others offering themselves about the heart strings and the veins, and from the faults of the womb and stomach.

The Veins also if they be filled with *malignant and venenate humors* of this kind, as it often happens *in pernicious diseases* especially in *the pestiferous, epidemical, and contagious*, and that malignant vertue do besiege not only the *heart* but especially the *nervous* kind, then *deadly Convulsions* do follow, such as are wont to happen in Fevers, not by reason of too much extinction of the Nerves from vehement heat, but by reason of the malignant nature of the humor: or also if *without* these *diseases a humor heaped up in the veins* changed *into a malignant quality* do put on that nature inimicous to the brain and Nerves, that induceth rather *epileptical* accidents than others (as in *melancholy* that such a poysonous quality is there also wont to cause *the true melancholy and madness* we shal shew in the *alienation of the mind*) then I suppose that *long continued and incurable Epilepsis* doth chiefly proceed from this cause: as also a poysonous cause raised from the same place, doth cause that *madness* that *lasts so long*; the which also for the like reason 'tis probable doth happen in the *mesaraick veins* such matter being collected there, which do produce rather an *Epilepsie* than *hypochondriack melancholly*: where also many do write that a *Catalepsis* is conteined, to wit a *melancholly humor* which we moreover hold to be *malignant*, from whence vapors raised up do cause it. And the manner of curing a *Catalepsis* they apply to this place and humor, as we shall by and by shew.

And also in *Women* such matter is wont more commonly to be heaped up about *the veins of the Womb*; where also *the blood reteined and corrupted* rather than *the seed* (which we think can scarce come to that malignity) doth cause *Convulsion*, such as are often wont to happen in *Virgins and Women that are hysterical their courses being stopt* before and after their childing, and it may also give an occasion for a *Catalepsis*.

That the like quality may arise in *the habit of the body* and cause an *Epilepsie* experience witnesseth; with which *Galen* and *Fernelius* being instructed they write that they have observed, the one that *an Ass in an Epileptick Child* ascending from *his Foot*, the other that *a Vapor*

running

running from the *Crown* through the outward parts of the head, did give occasion of *the Epileptical fits* as often as they came: and we also have somtimes observed that an Air running from *the hand* where afterwards *an Impostume* hath bred as also from *the feet* other or places hath done the like.

That the like *poyson* entring the body *from without* doth occasion Epilepsies for the like reason, as in other Countries *the bitings of virulent Beasts* especially *of the Viper and stinging of the Scorpion* do shew; so in our Countries 'tis manifest thatit doth happen *from the biting of a mad Dog* and besides the symptomes of *madness* and other cruel ones, they are endangered *by Convulsions* and at length by many fits the Patients are carried away.

'Tis not yet sufficiently manifest, whether there be any things found out, which can produce *an Epilepsie anew* only *by their malignant smel* yet that *epileptical fits* are furthered by *the smel* of some things is certain, which do it either by a certain propriety, of which are reckoned, *the ashes of an Asses hoof, Goats horn, Weathers feet burnt,* also *the smel of Bitumen, Myrrhe, Smallage,* and also the breathings of the Goats flesh, or *the Liver of the Hee-Goat* and so much the more if they be eaten: or because by a vehement and subtile vapor they assail the head and the nerves, made weak by the continuance of this disease (as also *Wine* which besides this, doth easily al- of its own nature trouble the Nerves) they occasion *Epileptical fits.*

The Cure.

In these kind of cases proceeding from the brain, all the operation of the Physitian which consists in prediction and Cure, must be applied to the Cause, not neglecting in the mean time that symptome which is most urgent.

The Cure of sleep and stupidisity from a cold distemper.

If therfore from a *simple distemper cold and moist imprinted on the brain* as we have said in old folks might happen by reason of their age, or from a disease of long continuance, they become *sleepy* or *stupid* yet are not altogether sick, as that is hardly corrected, so this fault is hardly taken away; yet *this distemper* may be somewhat mended, as was said in *a weakness of the mind* generated from the like causes, by the same *altering medicines and nourishments,* both *taken* and *applied.*

As also if *the stupidity* happen from *a cold and dry distemper* those things wil serve which are spoken of there in mending of the same *distemper*; but if a stupidity follow the brain actually cooled by *the external air or wind,* it wil be amended by applying of *skins* and *feathers* and other things actually hot, also by *suffumigations* which because they serve also in *a flegmatick* cause they shall there be explained more fully.

The Cure of a Carus and Apoplexy from flegm.

But if a heavy *sleep* be from *flegm* or an *afflux of a cold humor* or from *the excrements of the brain* as was said, although the common people despair of them, which they judg not oppress with *sleep* but toucht with an *appoplexy* and indeed they are not free from danger, yet the hopes of Cure is not to be cast off, whenas many of them are cured, unless some grievous accident supervene, as *a Convulsion* and the humor putrefying *an accute Feaver* as shal be said, do accompany it, as in a *Lethargie* which in old folks is deadly; though I have seen also after some *fits of Convulsions* they have nevertheless recovered of *a Carus*, yet *there was left in the sight and memory* some *error* which afterwards by reason of old age could no waies be amended.

But if *flegm* cause an *Appoplexy* then unless that *falling* downwards into the beginng of the spinal marrow do cause a *Palsie* as was said, the breath being taken away it presently kils the Patient.

Whether *flegm* cause *a sleepiness* or *stupidity* the Cure is almost the same, but that *stronger things* must be used in *an Apoplexy* whenas its cause is greater, and there is more hast to be made in the Cure by the reason of the danger; that which ends in a *Palsie* must be cured as a *Palsie*: and they apply also to a *Lethargie* no other Cure than to a *Carus* only a few things changed as shall be said, by reason of the *Fever.*

In all these therefore we *will revell* the *flegm from the head by general and particular evacuations*; and we will derive it also by neighboring *places* destined for the evacuation of flegm, as the *Mouth, Nose*: and we will endeavor to resolve it with things that draw it to *the Superficies of the head*: and with things *altering inwardly and outwardly* applied we wil endeavor to dissolve and wast it, to heat and strengthen the Head by proceeding as followeth.

In *sleepiness* if there be a great fulness they perswade *drawing of blood* by opening that *Vein of the Arm which is called Cephalick*, and in an *Apoplexy* the same signs appearing they grant it also somtimes for *Revulsion*, but done *sparingly*, and if it seem to have done any good they reiterate it: somtimes also they open *the vein of the Forehead*, others in these diseases would rather open *a Vein in the Foot*, all which must be done considerately especially in *the Apoplectical* left we may seem thus to have hastned death.

The belly must be provoked in both species, and be stimulated that they may stool, both for *Revulsion* and to stir up *the faculties laid asleep*, and that by casting in sharp *Clysters* and *Suppositories*, whenas otherwise they scarce go stool.

Suppositories seeing they do egregiously irritate, and may quickly be prepared and by reason of their dulness they cannot keep *Clysters*, are very convenient and oftentimes to be repeated, especially in the *Apoplexy*, in which also those things that burn, whenas the sick are without sense, can no waies do any harm.

Therefore *the gentler* being first tried, if they do no good, the following stronger things shall be used: Take *of Honey two ounces, juyce of Mercury, half an ounce*; *Bulls Gall half an ounce*: boyl them, add towards the end *of the root of white Hellebore and Pellitory of Spain of each half a dram*; *Coloquintida half a scruple, Salt Gem half a dram*: make a *Suppository*, or that it may be prepared sooner let these pouders be mixt with *raw Honey* and make *Suppositories.*

Clysters are good not only before *opening a vein* if that be done, to wash the Guts, but also after it, made first of things emollient and hot stimulaters proper for the head, by and by also of strong irritaters, which also whenas they do not keep them long must be repeated, and by so much the oftner as the disease is more urgent, as in the *apoplectical.*

At first therefore let such *a Gentle one* be given. Take *of Mallows, Mercury or Beets, Sage, Rue, Pennyroyal of each one handful*; *fresh Orrice roots three ounces, Bran, Chamomel flowers, Rosemary flowers of each one pugil*; *Carraway seed two drams*; make a *Decoction*, dissolve in a fit quantity of it, *of Honey one ounce, Benedicta Laxativa two drams, Oyl of Bayes and Rue of each one ounce, Salt one dram*, make a *Clyster.*

A stronger may be made thus, which may be given after the first, presently at the beginning, if the evil be urgent. Take *of the Roots of fresh Orris, Solomons*

seal, Sows bread, of each one ounce; Maſter wort, ſix drams; the Herbs Rue, Time, Sage, Bayes, Penny-royal, Organy, Calamint, Hyſſop, of each one handful; French Lavender, Roſemary flowers, of each one pugil; Caraway, Cummin ſeeds, of each two drams; Baſtard Saffron ſeed, Bay, juniper Berries of each half an ounce; Agarick tied in a Rag, two drams; Make *a Decoction:* Diſſolve in a *ſufficient quantity Hiera of Coloquintida, three drams; Honey of Roſemary flowers, one ounce; the juyce of Mercury, or Beets, one ounce; of Oxe Gaule, half an ounce; Oyl of Rue, two ounces; of Caſtor, half an ounce; of Foſſile ſalt, one dram;* Make *a Clyſter.*

The ſtrongeſt of all highly irritating in *an Apoplexy:* Take *of the Roots of Orice, Pellitory of Spain, of each one ounce; of Cuckow-pintle or graſs Plantane, half an ounce; Hellebore Roots, one dram; the Herbs Rue, Sage, Time, the tops of Centory, Water-creſſes, of each one handful; Caraway ſeed, half an ounce; Nettles and Rue, of each one dram; Muſtard ſeed, two drams; the Pulp of Coloquintida tied up in a Rag, half a dram; Roſemary flowers, two pugils;* Make *a Decoction;* Diſſolve *of Hiera of Coloquintida, half an ounce; Honey, one ounce and an half; Oyl of Rue, three ounces; Caſtor, Euphorbium, of each one ſcruple; Foſſile ſalt, one dram:* Make *a Clyſter,*

Although it were good to move *Vomiting* both becauſe that ſtraining doth rouſe them up, and alſo revel, yet in *the Apoplectical* tis not to be attempted, for fear of ſuffocation, whenas if an endeavoring to Vomit do urge them of their own accord; or a Cough, they are ſooner ſtrangled being forced by that violent motion, as I have ſeen it: Yet, in *a Sleepineſs* if their ſtrength be firm, a vomiting cauſed, for the ſame reaſon doth very much help; which may be actually done *by irritating the Throat,* or by giving of *a Vomit* deſtined alſo to Evacuate Flegm.

Purgers given to the *Apoplectick* by the Mouth, when as they ſwallow nothing, either flow forth again without any benefit, or if, as it often comes to paſs, they fal into their rough Artery, they induce a danger of ſuffocation, but when they are come to themſelves, then they are to be purged as thoſe *palſied* as ſhall be ſaid in *a Palſie.* But in *a Carus* or *lighter Stupidity* when as they can take ſomewhat; at firſt preſent *Purging Medicines* muſt be adminiſtred to them, but ſuch as in a ſmall quantity may quick be ſwallowed by them, whiles they are rouſed up, as at one draught, with little pains, whenas they are ſcarce obedient.

And therefore if we would give *Pills* whenas tis hard to take them, we rather diſſolve them nothing fearing here their ingratefulneſs, whenas they being a little ſtupid, do little obſerve that, as Take *of Cochiæ, fœtidæ Pils half a dram, Caſtor half a ſcruple,* diſſolve them with *Sage or Roſemary or Cinnamon Water,* and give *to drink.*

But we ſhall more rightly give *Lozenges* diſſolved as of *Diacarthamum, Diaturbith, of the Citron ſolutive* or the like *Electuaries* as *Diaphœnicon, Indum majus, and other purgers of Flegm;* the *Heiræ of Coloquintida* we may infuſe, unleſs their extraordinary bitterneſs do hinder.

In the progreſs alſo purgers muſt be repeated, the humor being firſt prepared, eſpecially if it be thick, and they muſt be reiterated again, if the evil yeelds not to the former and that the Patient recover.

It ſhall be prepared therefore after this manner. Take *of the Syrup of Bettony, of Hyſop each two ounces, Oxymel of Squills one ounce Syrup of french Lavender half an ounce Roſemary, Sage, Baurm water each two ounces,* make *a Julep* for four doſes, aromatize it with *Cinnamon* or ſomwhat elſe.

Or take *of the opening Roots ſteeped in Wine each one ounce, of Orice half an ounce Angelica two drams, Lyquoris ſix drams, the herbs Sage, Marjoram, Time, ground Pine, Bettony each half an ounce, Aniſe, Fennel ſeed each one dram, Gith, Parſley each half a dram, the flowers of Roſemary, Lavender, or french Lavender, Elder, Primroſe each two drams,* make *a Decoction* and to a pint and half add *Sugar or Honey,* or ſome of the foreſaid *Syrups* to ſweeten it, clarifie it and aromatize it with *Cinnamon* for four doſes.

Or let theſe *ſimples* be infuſed *in white Wine* adding the *Topps of the leſſer Centory two drams,* becauſe it doth very much devide Flegm, *Wormwood three drams* to give it a good ſmell, and let him uſe it.

If you will make *the Syrup for your uſe* add to the forementioned *Decoction of baſtard Saffron, Sena each an ounce and an half, Agarick three drams, Turbith two drams, Ginger one dram,* and with *Honey* or Sugar let it boil, let him take one ounce at a time.

After the ſame Rule you may make a *purging Wine* by mixing theſe Purgers with other things according to art.

A purging Potion alſo may be made thus, Take *of Agarick infuſed in Oxymel and Sage and Roſemary Waters one dram and an half, of Ginger* likewiſe *infuſed one ſcruple;* ſtrain it, diſſolve afterwards of *Diaphœnicon and Diacarthamum each two drams and an half,* make *a Potion.*

By the paſſages deſtined to purge *Flegm* as the *Mouth, Noſe, and Eyes,* we muſt derive the Flegm from the Head, with thoſe *Medicines* which do this by irritating the coat of the Mouth and Noſe which is very ſenſible, that the expulſive faculty being ſtirred up by theſe may drive forth the Flegm and Tears by theſe parts and the Eyes adjoyning; but when as they are not able *to Gargle* or *Maſticate* we do not uſe this form of *Head Purgers* till they come to themſelves.

But *we rub the Palate* with thoſe things that draw forth Flegm, yet in that quantity and form, that if they do fal into the rough Artery of the *Apoplectical* they may not ſuffocate them.

Muſtard ſeed which is very powerful; doth ſo provoke Flegm, that it preſently moves teares. Tis boyled in *Aqua vita* or *ſtrong Wine* and the *Palate* is rubbed with that *Decoction;* or reduced into a *Powder* and mixt with *Honey,* tis anointed: inſtead of which the *common Compoſition* will ſerve, which being made of *Muſtard ſeed* is uſed at meals for ſavce, which we may have quickly ready at hand.

The Root of Pellitory of Spain boyled in Oxymel doth the ſame, uſed after the ſame manner.

Euphorbium alſo diſſolved in *Aqua vita,* and other things that fire the Jaws,

As alſo *Caſtor* mixed after the like manner and given.

Some rub the *Hieræ* and other *Purging Electuaries* on the Palate, but without any fruit or benefit, inſtead of which tis better to uſe the *Confection Anacardine* which doth ſomwhat inflame.

Or make ſuch a *Compoſition;* Take *of Muſtard ſeed, long Pepper, the root of Pellitory of Spain,* Pouder them and mix them with *Honey and the juyce of Rue, Horſe-Radiſh.* Make *an Oyntment.* we omit the *Vinegar* which they add, becauſe it duls the vertue of thoſe acrid things, as we ſee it comes to paſs in *Onions* and *Radiſhes* if they be eaten with *Vinegar.*

A vellication of the coat of the Noſtrils which is very ſenſible, doth Egregiouſly draw forth Flegm, either dropping from the *Noſe without violence* and flowing forth by *Tares from the Eyes,* or with a certain *violence* by *ſneezing;* which if it happen to the *Apoplectical,* is a good ſign. Yet this violent rouſing up is not to be attempted in a *Sleepineſs* before the matter be a little emptied, leaſt the humor yet filling the Brain being moved do

oppreſs

oppreſs it, or ſuddainly falling into the beginning of the Nerves, do breed *a convulſion* or *reſolution* the which is ſcarce to be feared in the *Apoplexy* when as they are no otherwiſe cured, unleſs *a Palſie* follow it; but theſe things may be done divers waies, amongſt which *Errhines* are leſs proper, when as the ſick do not attract them, therefore this may be performed after another manner. Thus,

Let the Noſtrils be anointed with the ſame *Ointment* which we ſaid ought to be rubbed on the Palate, or leaſt that thicker things ſhould ſtop up the Noſtrils, which ought to be free for reſpiration ſake in *the Apoplectical*, we muſt uſe theſe that are *more thin*; Take *of the juyces of Radiſh, Onions, Orrice, of each equal parts*; Let *a Feather dipt* in theſe be often put up into *the Noſe*.

Let *the Pouders of Hellebore, Pellitory of Spain, Pepper, Euphorbium* be blowed up, but in a ſmal quantity.

The actual *Irritation of the Noſtrils with a Fibre of Hellebor*, or *a Hogs briſſel*, or ſome *thicker Hair*, doth powerfully worke and draw forth Flegm.

The ſmel of Onions doth wonderfully provoke *Tears* upon which account if the thin outward Rinde be taken off and they applied to the *Noſe* it doth much good: *the ſmel of Muſtard ſeed* alſo and *Radiſh* do the ſame, and the *Leaves of Spear wort* bruiſed and ſmelt to do it moſt powerfully.

Theſe being done, if ſo they come to themſelves that they can uſe *Errhines, Maſticatories, Gargariſmes*, then theſe muſt not be neglected, as ſhall be explained in their place.

We will endeavor alſo to revel the Humor from the part affected *by thoſe things that draw to the ſuperficies of the Body* whether they do it by *heat* or *pain*, the which alſo will work more powerfully, if together *by diſſolving the continuity* they open a paſſage for the Humor attracted by which it may be emptied.

Upon this account *ſtrong Fricti*ons muſt be made *with the Hands or with a rough Cloth*, beginning with *the Head* and going downwards by *the Back*: Alſo of *the Arms, Thighs*, and thoſe places which are moſt cold, which we ought to rub til they grow hot and red, adding ſomtime alſo *hot Oyl* or *Salt*.

For which cauſe alſo *Ligatures* muſt be made in the extream parts which may cauſe pain which muſt be ſomtimes looſed and tied again.

Lotions alſo of *the Feet* will do good, *of the Decoction of Sage, Rue, Bettony, Penny-royal, Calamint, Dill, Chamomel, Roſes*.

Cupping-glaſſes alſo with a great deal of Fire, muſt firſt be applied *to the hinder part of the Head*, if perhaps the Humor may be derived through its great mouth, for which cauſe they muſt by and by be applied *to the hinder part of the Neck*; then *to the Shoulder blade* and *Shoulders*.

And ſomtimes alſo *Scarification* muſt be made in thoſe places before the Cupping-glaſſes be applied, and *the Wounds made* muſt be rubbed with *Pickle*.

Pulling of the Hairs about *the Privities*, from under the *the Armpits*, alſo *vellications of the Beard and Hairs* made up and down *the Body*, and *Prickings* and *Burnings* will profit much.

A frying Pan or Shovell, or ſome other *Iron plate red hot*, ſo long applied *to the Region of the Head* till it heat it very much, and as it were curle the Hair yet doth not burn the Head, by egregiouſly drawing outwards, hath oftentimes cauſed *the Apoplecticall* to come to themſelves; the uſe of which *the Arabians* brought up.

A Dropax alſo or *Pication* applied *to the Region of the Head* being firſt *ſhaved* and being often taken off whiles tis yet hot and renew'd, doth help alſo by calling forth the Humors to the ſuperficies; both if it be *ſimple*, and if it be *Compounded*, the which alſo may be thus made more effectual, by the addition of moſt hot things and it will raiſe bliſters; Take *of Pitch, half a pound*; *Oyl of Rue, as much as will ſuffice that it may melt*, perhaps to *one ounce and an half*; add *of the Root of Pellitory of Spain, Muſtard ſeed, Pepper, of each one dram, Euphorbium, half a dram*. Mix them.

Sinapiſmes will do the ſame applied upon *the Head* and thoſe both *ſimple*, or thus *Compounded*; Take *of the Pulp of Figs extracted from a light Decoction of them, Muſtard ſeed, of each one ounce and an half*; *Pigeons or Swallows Dung* (which is found every where in their houſes) *three drams*; *Pepper, Euphorbium, of each half a dram*; *Caſtor, one dram*; *Oyl of Spike, ſix drops*; Mix them with *the ſharpeſt Vinegar*.

The leaves of Nettles, do as it were actually raiſe bliſters, which are rubbed on *the Nape of the Neck*, and for revulſion on *the Thighs*.

Alſo *Spearewort bruiſed* doth do it moſt powerfully, if it be laid to *the hinder part of the Neck*.

Alſo *a Potential cautery* applied to *the Region of the Head*, or to *the ſaid part of the Neck*, although when neceſſity doth require as in an *Apoplexy an actual one* is more rightly applied, whenas it works ſooner, and they do not feel it, by which the Hairs of the Head may be burnt, and the Skin alſo a little.

Things altering which ought to diſſolve and diſcuſs the Humor and ſtrengthen the Brain, are given *by the Mouth* rather *in thoſe that are ſleepy*, then *Apoplectical* who ſwallow nothing almoſt, the which notwithſtanding if they be prepared in a very little quantity and yet effectual, may be by drops alſo poured into the Mouth *of the Apoplectical*, when as being contained in the Mouth they exert their vertues; the which notwithſtanding falling into the rough Artery, that they may not move coughing or ſuffocate them, ought rather to be *Liquid*.

So *ſtilled Waters* are chiefly commended ſuch as are eſpecially *that of Roſe-mary, Sage, Rue, Lavender*, which being dried and infuſed *in Wine*, if they be diſtilled, do yeild a more efficacious *Water*: *the diſtilled Water of cinnamon* as it is pleaſant and Odorous ſo tis highly effectual, *the water extracted from the flowers of the Lilly of the Vallies and of the Linden Tree* whiles they are yet *freſh* in this caſe is highly eſteemed amongſt the vulgar: Some alſo commended *the water of Marigold flowers* and *the water of the Herbs Celandine and Balm*.

Thoſe Compound are more effectual, of which ſort there are deſcribed innumerable we from the more choice and appropriate may prepare ſuch a one, As, Take *of Sage, Roſemary, Time, Marjoram, of each half an ounce*; *Rue, two drams*; *Lavender flowers, three drams*; *French Lavender, one dram*; *Rocket ſeed, one dram*; *Cinnamon, half an ounce*; *Nutmegs, two drams*; *Cloves, one dram and an half*; *Cubebs, one dram*: Pouder them, infuſe them *in the moſt excellent Wine* that it may be above them the ſpace of two inches, then diſtil them; give one ſpoonful, two, or three, according as he can ſwallow: *Caſtor* may be mixed with the ſame *Water* being ſomtimes ſtrained and ſo given; neither is it to be mixt with the whol *compoſition* as they are wont to do; for it is better to reſerve that which is grateful ſtill for your uſe, and when there is need, to mix theſe ungrateful things with ſome part of that and ſo give it: they think that *Maſtick* mixt with theſe *ſtilled waters* or *infuſion* doth very much increaſe their vertue.

Alſo if you infuſe the above mentioned *Herbs* in *the ſpirit* or *moſt excellent ſtilled liquor of Wine*; and macerate them a long time in *the Sun* or ſome other *heat* or make it ſtronger *by reiterated infuſions* you ſhall make a moſt

most excellent liquor for these uses, or if out of every *herb* a part, you make such an *infusion* every one shall be effectual for the same; as also if you mix many of them so together then also you may so give a strong *compound water*; amongst which *the water* which is made *of the infusion or distillation of Rosemary* is extold above the rest: but though *the spirit of Wine* have some stupefying vertue, yet because by the extream subtilty and heat with which it is endued, it carries the vertue of other things strongly to the brain, and casts forth flegm and stirs up the native heat and drowzied faculties, by reason of these commodities, the aforesaid simples commodiously infused in it, do lay down their vertues in it & dulling its *narcotick vertue* do make it a fit medicine for the cure of the foresaid affects: the which *spirit of Wine* yet to give alone, as some do advise we think is not good by reason of its stupefactive power; as neither can we allow *Treacle waters* or *others* made of *Opiates*, as neither *the Electuaries* themselves by any means, by reason of *the Opium* which they contain, which though they be old, yet do in no wise leave their *narcotick vertue* which in *a stupidity* and *sleepiness* we ought by all means to shun.

Oyls extracted by the art of chymistry from the aforementioned things above all the rest do exert the greatest power, given in the least drop, and therefore in all those *that are stupid* are most profitable, if *one* or *two drops* be powred into the mouth or dissolved in *a convenient liquor* be given to those that can swallow, of which sort is *the Oyl of of Marjoram, Sage, Lavender* and that sweet *Oyl of Cinnamon* and *of Cloves*. *Hollerius* extols *the Spirit of Vitriol* rather than which they call *the Oyl* which because it is sharp may cause watchings; they attribute much also *to the Oyl of Amber*.

More solid Medicines may be given after the like manner *infused* and *diluted* as long as they hardly admit of medicaments, and when they are to come to themselves that they can also take grosser things, then, as also in the whol process of the disease afterwards. these may be given also in other forms.

The Confection Anacardine as 'tis approved of in all cold diseases of the brain, so here also chiefly, which we will use rather than *Treacle* or other *Opiates* giving it *by it self* or dissolving with *Aqua Vitæ* in which the aforementioned are first infused. *Galen* gives *Castor four or five grains* weight *with Oxymel* in *a Lethargie* the which we may use also in the other species, to which we may add *some grains of Euphorbium* the which also may be given with *spirits of Wine made by infusion*.

Mustard seed bruised and given in like manner *half a dram weight* is wonderfully convenient, because its vertue is carried upwards to the head, or give *the condite* of it, and add it to the meats *by way* of Sawce.

The juyce of Onions may be given with *Rue* or *Sage* water or with *the said infusion to two drams* or with *Wine* that it may be more grateful.

The eating of *Water-cresses* also is approved, whose *sharp juyce for the quantity of one spoonful* may be given after the like manner as the rest.

The following *Electuary* is very convenient, the which we may use in the progress of the Disease. Take *of the Conserve of Orrice, the true Acorus that is the Calamus in shops of each one ounce; of Sage. Rosemary, Marjoram, French Lavender or Lavender each half an ounce; Confection Anacardine two drams, the powder of Diambra Diamoschum each half a dram; the seeds of Rocket, Rue, of each one dram: with Oxymel of Squils or Honey Anacardine* make *an Electuary*, let him take the quantity of a *Chesnut* every other day.

One dram of this Confection may be taken, and some *grains of Castor or Euphorbium* may be mixt with it, when necessity urgeth, and so drank off.

The Chymists give *the Extract of Sage in an Apoplexy* for a great secret.

Of those things which are applied *outwardly* for alteration sake, those things also which are moved to *the Nose* do it most effectually, seeing their vertue penetrates in a strait way to the brain, wherefore *the nostrils* must be anointed with these *juyces*. Take *of the juyces of Rue, Marjoram, the strongest Vinegar* (which is chiefly used in a *Sleepiness* that it may cause watchings) *of each alike quantity*, and *with a Pencil* or *Feather* dipt in them anoint *the nostrils within*,

Or thus, Take *of Castor, Assa Fœtida each some quantity* which dissolved in *the strongest Vinegar* apply it after the same mannerr

Also take *of Oyl of Rue two drams, Vinegar of Squils one dram, the juyce of sea Onions half a dram, Castor one scruple*, mix them for an *ointment for the nostrils*.

Oyls extracted by the art of Chymistry are most powerful, if *one drop* be put into *the Nose* such as we have formerly said might be exhibited; especially *Oyl of Spike* which by its subtile evaporation doth wonderfully heat, and by mordication of the Eyes, doth also draw forth Tears.

Odors also by penetrating to the upper parts do very much help, such as is *the most strong smel of Vinegar* received at *the Nostrils* which by drying doth cause *Watchings*.

A Suffumigation also from that if it be poured upon a red hot plate, and received by *the Nose* is convenient.

Grosser Fumes, so that they choak not, admitted *at the Nose* will do good, as *the fume* which is raised from *mans hair burnt*, especially if before they be burnt, they be first moistned with *Vinegar*; and that which is caused from *feathers burnt* whose matter is the same with that *of hairs*, amongst which the common people judg *the feathers of Partridges* and *Peacocks* to be best.

And being made thus also it will very much help. Take *of the hairs of a man cut small and moistned with the strongest Vinegar half an ounce, the shavings of Harts horn half a dram, Gum. Galbanum, Amoniack, Opopanax, the Agat each one dram; Castor half a dram, Gith seed one dram; mix them*: let some of it be cast upon the coals, and let him receive *the fume*.

The smoak of Brimstone fired is wonderful effectual, which is sufficiently apparent by this that makes *red Roses* white.

Also *things put into the ears* if they be very effectual, may do some good, as if *Oyl of Spike* be dropt into them, or *Spirit of Wine with the infusions* as was said formerly; also *the Oyl of Rue*, but that which is extracted *by distillation* rather than by *maceration*.

Also the following things are applied *to the superficies of the Head* first *shaved* for alteration sake, as *fomentations* or *embrocations* as followeth, Take *of the roots of Orrice, Cyperus, the true Acorus of each one ounce; the herbs Marjoram, Bayes, Sage, Wild Time, Penny royal, Savory, Balm, of each one handful; flowers of Lavender, French Lavender, Chamomel, of each one pugil; seeds of chaste tree one dram*; boyl them in *a Lye* adding a little *Wine*, foment or irrigate *the Head*.

Or thus. Take *of the Oyl of Nuts two pound, Aqua vitæ one ounce and an half, juyce of Rue one ounce, Pennyroyal, Wild Time, Sage, of each two drams*; cut them and boyl them for *a fomentation of the Head*.

Afterwards anoint *the Head* with these things following. Take *of the Oyls of Rue, Bayes, of each two ounces; the juyce of Rue one ounce, Vinegar one ounce, Aqua vitæ one ounce*: boyl them to a consistence adding *Castor one dram, Euphorbium half a dram*, anoint the head.

It wil be *more effectual* thus. Take *of the Oyls of Rue two ounces, of Pepper, Mustard seed of each one ounce; the distilled Oyl of Spike, Oyl of Rosemary or Time made by distillation of each half a scruple; the Gums of Opopanax, Bdellium dissolved in Aqua vitæ of each half an ounce; the seeds of Rue, Mustard each one dram; Castor, Euphorbium, of each half a dram; the Hairs of a man burnt half a dram, Wax as much as is sufficient,* make *a Liniment.*

A Plaister, may be prepared of the same adding *Pitch* or *Rozin,* or *a Cerote* the quantity *of the Wax* being increased, in the preparing of which the weight *of the Gums* is augmented, adding also *Ammoniacum* and *Assafœtida,* which being thus prepared, they are applied *to the head like a Cap.*

Cataplasms of herbs and roots bruised may be made after the like manner. As, Take *of the Leaves of Rue, Pennyroyal, Sage, of each one handful; fresh Orrice roots two ounces;* boyl them in *strong Wine,* to which you shal mix *of Vinegar, Aqua vitæ each one ounce,* adding afterwards *of Sea Onion roasted under the ashes one ounce, rotten Apples one ounce and an half,* bruise them and afterwards add *Oyl of Orrice, Rue, of each one ounce, Oyl of Spike half a dram, the root of Pellitory of Spain one dram, Pigeons or Swallows dung, two drams, Castor, Euphorbium, of each half a dram:* mix them and make *a Cataplasm.*

Some apply *the Lights of a Hog in a Lethargie.*

Others anoint *the Head* with *the blood of a Bat.*

Besides these *Remedies* which are applied *to the Head,* there are *Remedies* also applied *to the Back-bone in the Apoplexy* that the matter may be carried downwards, to the beginning of which this *attractive Plaister* is applied. Take *of Gum Opopanax, Sagapen, of each one ounce;* dissolve them in *Aqua vitæ,* afterwards mix *of Mustard seed two drams, Castor, Euphorbium, of each one dram;* make *a Plaster,* apply it *to the nape of the neck,* and afterwards anoint *the whol Back-bone with hot oyls* such as is *Oyl of Rue* drawing your hands downwards.

It wil not be unprofitable also to rub *the palms of the hands of Persons apoplectical with Sulphur and Vitriol* dissolved in *hot Oyl* and mixt together.

Amongst *Amulets* they affirm that the *Emrold* hanged about *the neck* doth very much good if it touch the bare flesh: *a Nightingale* laid under *the Pillow, the head of a Bat* laid between *the Tiles* of the house, are thought by a propriety to rouze up from *sleep.*

The cure of a Carus and Apoplexy from Blood.

If *the sleepiness* be *from blood,* because the blood is then remaining in the vessels 'tis easily cured, unless some more grievous disease lie hid: but if *a vein being broke the blood vomed forth into the brain* do cause *an Apoplexy,* whether this happen from *a plenitude,* or *a violent cause,* unless it presently break forth *out of the Skul* by *the Nostrils* or *Ears,* as it often comes to pass, being presently turned into clots it bringeth death, and so much the sooner if the substance of the brain be also hurt; *a Convulsion* then going before, if the blood first putrefie, before the Patient die.

But we ought presently in cases of this nature, and that very speedily whiles the matter is yet flowing, *to revel, derive, and drive forth the blood* in the order following.

First of all *a vein is to be opened* if nothing hinder, to wit *the shoulder vein in the Arm* and if *the plenitude* be *great* in both Arms; then also in *the Leg the vein of the Ham or Ankle* must be opened, which some do before that of *the shoulder* that there may be *the greater revulsion* the which notwithstanding is more rightly performed in the Arm, and then *the vein of the Forehead* and *Nose* may be opened, which *Rondoletius* doth by pricking with bristles, or *under the Tongue for derivation sake Revulsions* being premised, the which wil suffice if *the plenitude* be not very great for it is dangerous to open *the jugular vein,* as some teach: and thus *sleepiness* proceeding *from plenty of blood* is easily remedied; and in *a contusion of the Head* it brings great help.

Scarrification with *Cupping-glasses* applied there especially where *the jugulars* run up *by the neck,* doth very much derive, the which also they approve done upon *the chin:* the which also may be continued *by Leeches* if time give leave, especially if they be applied *to the fundament* the Hæmroides being suppreſt, the which if they were accustomary before, and now are stopt, or otherwise swel, we ought to open.

Cupping-glasses alone also applied to those places, and *to the shoulders* and *shoulder-blades* when *the plenitude* is not so great may suffice.

The which also *Ligatures and Frictions of the extream parts* may perform.

Moving of the Belly in this cause, doth equally revell, as if it were from flegm; and that *by Suppositories or clysters* highly stimulating, yet less inflaming than in another cause, and that presenly after *a vein opened* which here ought to go first as the better.

Such wil be this following *Clyster* which that it may be presently at hand is thus easie to be made. Take *of herb Mercury or Beets in the winter time two handfuls, Of Violet Leavs one handful,* pour to them *of Lye as much as is sufficient,* make *a Decoction,* and *in one pound of it* dissolve *of Honey two ounces, Fossile Salt one dram, Butter or Oyl one ounce* (least the too great quantity may infringe the vertue of the others) make a Clyster.

'Tis good to cause *sneezing in the Apoplectical* after some *Clysters* administred yet not too violently.

We must repel *with Oxyrhodines* if it appear that the head be very hot, but with such as are astringent rather by drying than cooling, yet by warily using of them, least we drive the matter inward if it be in the superficies; and therefore *Rondoletius* doth use only *a drying Ointment and Sinapism in a Carus* yet when necessity requires such a one made, Take *of Rosewater three ounces, juyce of Plantane one ounce, or the water of it two ounces,* because the vertue of this inhibiting the influx of blood is wonderful, *of Rose Vinegar one ounce, the Whites of Eggs beaten two,* mix them. *Oyls* are omitted by reason of their laxness.

A yong Pidgeon Chicken or Puppy dog cut in the middle and applied to the head, have a wonderful vertue in discussing the blood, as also other things expresst in *a Phrensie, Rondoletius* writes that *Water-cresses eaten* in *Broth* or *Sallets* do heal *a Carus proceeding from blood.*

If *a Contusion* appear in *the head* and there is suspicion *of clotted blood in the brain* those things which shal be spoken of in *Contusions,* must be outwardly applied.

Of which sort is this *Cataplasm.* Take *of Wormwood one handful, Flowers of Red Roses and Chamomel of each one pugil;* make *a powder,* boyl it in *Oyl of Roses,* beat it adding *of Bean flower one ounce, Sanguis Draconis two drams, Mummy three drams,* and apply it.

When they can take any thing *by the mouth* upon the same account things dissolving *clots of blood* are given, of which we shall treat in their place.

The Cure of an Apoplexy from the hurt of the brain.

But if that *the substance of the brain being hurt* doth cause an *Apoplexy,* whenas it is *deadly,* both because the continuity of a principal part is dissolved, and because by the injury offered from without, it must needs be that the bosomes of the membranes are hurt too from whence comes a great flux of blood, they are to be left to Prognosticks, yet

in the interim as long as they live, *the Wound* nevertheleſs whether *cut, pricke* or *contuſed*, ſo it ought to be handled.

But if *a depreſt part of the Skul broken* do cauſe *a Stupidity by preſſing the Brain* it muſt be lifted up and drawn forth by *an Inſtrument and other Arts*, if there be *any ſmal Bones* the which alſo do often prick they muſt be taken out: *the Blood* muſt be waſht out, and as *Fractures* and *Wounds* ought to be healed, muſt here alſo be proceeded, for ſo if the ſubject part be no waies hurt, they come to themſelves and are reſtored to health.

The Cure of a ſleepy Stupidity from a Tumor of the Brain.

If *a Tumor in the Brain* cauſe *a Stupidity* or as ſome have thought *a Lethargie*, becauſe it can hardly be known the man living, there is ſcarce any other Cure applyable to it, then that which is due to cold Humors, when as this Humor muſt be cold, which can cauſe that, for a hot one would rather cauſe *a Phrenſie*; but *the Stupidity*, will then be of long continuance, and *Mortal* when this Tumor hid in the Brain, cannot be mollified nor reſolved.

Vapors alone, unleſs there be ſome occult quality, as ſhall be ſaid, ſcarce breed *a Stupidity*, though ſome write that *an Apoplexy* may be cauſed thence, which by the toſſing and concuſſing of the Body only, the vapors being diſcuſſed, is healed: but they often cauſe *a ſleedineſs* in which we ought to have reſpect unto *the part that ſends them*, or *the Stomach, Womb, Guts and the Veins in Feavers, and the part receiving them*, viz. *the Head*.

If by default of the ſtomach after eating and drinking that *inclination to ſleep* do happen, which is wont to trouble many after Dinner and Supper, in thoſe accuſtomed and ſome Natures, it doth good rather then harm by refreſhing the wearied Body and therefore they become afterwards more chearful to undergo their Duties; but if ſo be that it oppreſs *the Head* and cauſe *plenty of Excrements* in it, it will be prevented *by parſimony and temperance in meats by the moderate uſe of Wine and that ſmal*, if alſo they protract not their *Dinner too long* nor ſit *too long at Table* but after a ſhort Dinner, preſently riſe, Walk, and do things ſportful, which by inviting the minde another way, do no waies ſuffer it to be at reſt: the which in ſome is done by *Muſick* in others by *Play* or ſome *other actions agreeable* to every ones *Genius*: and when *heat* cauſeth *ſleep*, if at that time they take their Victuals in *a temperate* or rather *ſomwhat cold place*, and and be converſant there, and ſtuddy to correct this ill cuſtome by degrees *leaving it off*.

The Cure of a deep ſleep from a Vapor.

But if *a deep ſleep* be cauſed by reaſon of the plenty *of Meat and Drink* taken *that is too much Vaporous*, *a Vomit* will help, *being repeated* if it do no good at the firſt time; and *emptying the ſtomach* by *Pills* will be profitable.

But if *Vapors* raiſed up *from Humors* exiſtent *in the ſtomach* induce *a Carus* they muſt be emptied, and the ſtomach ſtrengthened, as alſo if they proceed by reaſon *of the Womb, the remedies* muſt cheifly be applied to that; and if from *Worms* the ſcope of curing muſt be directed to the killing and voiding of them.

The Cure of Carus or Lethargie in Feavers.

But if that *a Vapor* elevated in *Feavers from the Veins*, do cauſe *a ſleepineſs, the companion of the Feavers*, in the Cure of that we muſt alſo have reſpect unto *the Feaver*, which if it begin preſently in the ſaid *Lethargie*, ſinceu it is very dangerous, and for the moſt part kills old folks, and upon that account doth draw the Cure rather to it ſelf then to *the Feaver* it muſt be thus ordered, that when as *hot remedies* do agree with that alſo as in another *Carus*, by reaſon of *the Feaver accompanying*. In other *Feavers* if *a Carus* ſupervene in the declination, becauſe *the Feavers* is now ceaſed, the whol Cure muſt be directed to the turning away of this grievous Symptom. *In intermitting Feavers* ſleep invading at *the beginning of the Fits* when as it is not very dangerous, it requires no other *private* Cure then what is agreeable to *the Feaver* only as ſhall be ſaid by the way, reſpect muſt be had unto *the Head*.

But for *the Brains* ſake which receives thoſe *Vapors* which produce *ſleep*, thoſe things muſt be adminiſtred, which may hinder the aſcent of them.

By giving thoſe things which do as it were depreſs and beat back thoſe Vapors raiſed in a part; which may be done if they riſe from *the ſtomach by aſtringent remedies* and thoſe which diſcuſs them and alſo *Wind*: and in *Feavers* if *altering things* be given which repreſs their Evaporation, as was ſaid in thoſe places.

Then we muſt draw back *thoſe Vapors* already *carried to the Brain* by *things that revel* and derive them from the part affected, eſpecially if that *grievous Lethargie* invade and *a Feaver* after the ſame manner as in a ſimple *Carus* with the ſame things which we ſaid did revel Flegm from the Head, and by ſo much the more here, becauſe Vapors do aſſail the Head, therefore in *a Lethargie* alſo this muſt be attempted by *Bleeding, Scarifications, Cupping Glaſſes, Clyſters* and other things: the which alſo take place when *a Carus* follows *a Feaver*.

Outwardly thoſe things muſt he applied to *the Head* which do repreſs *Vapors* in all *the Species* cauſed by *conſent* eſpecially *in Feavers* and *a Lethargie* alſo at the beginning.

Of which ſort are theſe following *Oxyrrhodines*: Take *of Roſe water, three ounces*; *Vinegar of Roſes, three ounces*; *Oyl of Roſes, one ounce*: Mix them, apply it *to the Head* as it ought to be, or anoint *the Head* with it.

In the progreſs make it thus if the Diſeaſe continue: Take *of Vinegar of Roſes, two ounces*; *Oyl of Roſes, one ounce*; *of Camomel, half an ounce*; *Oxymel of Squils, one ounce and an half*: Make an *Oxyrrhodine* according to *Rondeletius*.

Afterwards we muſt proceed to *ſtronger and hotter things* by degrees, if *the Lethargie* do not yet ceaſe, ſuch as already are explained in *a Carus* when as in the progreſs of the Diſeaſe, the cure of *a Lethargie* ought little or nothing to differ from that of *a Carus* and therefore for the moſt part they are deſcribed by Practitioners in the ſame Chapter.

If a certain *hidden quality* cauſe *a heavy ſleepy and Stupidity* the Cure muſt firſt be diſtinguiſhed, whether they come from *a Narcotick* or *Malignant* quality or whether they proceed from *the Devil*.

The Cure of ſleep and Stupidity from a Narcotick quality.

If the ſaid *Narcoticks being taken* do induce *ſleep* or *Stupidity* then *Vomiting* muſt be procured ſpeedily, by *actually* irritating *the Throat*, or *giving of Vomits* if they can ſwallow.

Alſo thoſe things muſt be given to drink which can abate the vertue of *the Narcoticks* of which ſort hitherto hath been beleeved hot thing are, which by abating the coldneſs of the Narcoticks do ſo do good, and therefore they give the hotteſt things, ſuch as are *juyce of Onions, Garlick, Pepper, Caſtar, Euphorbium*. But we who have elſewhere ſufficiently declared that *Narcoticks* alſo are hot, do think, if theſe do any good they do it rather becauſe they ſtir up the benumed faculty and the native heat then that they abate the ſtrength *of the Narcoticks*, but *Treacle* which many approve of in this

this case, we do no waies allow, by reason the Opium which is in it, wherefore it rather encreaseth than impaireth the strength of the Narcoticks, whence neither do we give the strongest wine as they teach also much less its spirit upon this account, since that these also are Narcoticks; whence *Dioscorides* writes truly that Hemlock if it be given with Wine doth kil the sooner, although here they feign another cause why it doth it; viz. because it carries the vertue of the medicine sooner to the brain.

But those things whic[h] indeed do debilitate the strength of Narcoticks are those which by leanifying by a certain temper do correct their heat rather than coldness, the which we then chiefly use when the body is vehemently inflamed by a Narcotick as we have said by Spirits of Wine a deadly Stupidity and also an excessive heat is raised in which case as also in others raised from the like cause, we give Natural Milk and Factitious made of Almonds and Guord Seeds also Butter, common Oyl and Oyl of Almonds and other Fat and mucilaginous things the which also we said were proper in corroding poysons.

Also Acid things given, as they do quel the heat of Acrid humors and Choler, so also the efficacy of Narcoticks which I am wont rather to give, as Acid juyces or syrups or Vinegar it self which therefore we have said elsewhere is the most certain Remedy for Drunkenness, the other things which do it by a certain propriety shal be explained in the Remedies.

The Cure of a sleepiness & stupidity from a malignant quality.

If *a malignant quality*, which we cannot rightly explain, come from without from the Stroke of a Beast from whence a Sleepiness or stupidity ensues, then things *antipharmacal* resisting these Poysons must be given, such as are described in their place, but if that such a Malignity be raised up in the body as in Malignant Feavers we have said that then also a Sleepiness and Stupidity doth happen, and then applying those things which the malignity of the same method of cureing is to be observed which was mentioned in a Lethargy.

The Cure of Dæmonical sleep from an evil Spirit.

If a *Dæmonical Sleep* delude Witches as we have said, seeing the cause is preternatural, it will not be cured by natural Remedies but by prayers and amendment of life, but if they refuse to do that they are worthy to be purged by fire.

The Cure of an Apoplexy from the wasting of the animal Spirits.

The animal spirits being spent in the Brain, if a man become Apoplectical death it self prevents al manner of cure, which we ought to foretel to be ready at hand.

The Cure of an Epilepsie Catalepsie and Stupidity from the too much profusion of the animal spirit out of the Brain.

But the Spirits being spent in the Brain by great meditations if somtime they become stupid they easily come to themselves again upon the return of the spirits, but if that *by some vehement affection of the mind* the spirits be so carried forth, that being taken with a grievous stupidity, with Rigor they become Cataleptical; then the evil is very pertinacious and that especially if this disease have its original from Melancholly for those thus affected are hardly cured, and though they be freed from it, yet they continue Stupid and Melancholly. And if from Anger also they fall into an Epilepsie they are not free from danger, in which species whiles they are in the Fit, the same Remedies are likewise applied, which are used in the rest of the Epilepical to the quickly taking off of their fits, the which ceasing, the cause must be turn'd away, this being done if the evil do ttil return, whenas by that we know that the internal cause is yet present, which the external did first move, then the care must be fitted to the taking away of that, which in a Catalepsis they apply to Melancholly, in an Epilepsie to the purging of Flegm, as shal be said.

But if that a *Convulsion*, or which seldomer comes to pass, a Catalepsis do follow from a Disease of the Nerves drawing the Brain into consent and somtimes affecting of it too, the Cause it self must be diligently considered, and according to that we must foretell and order the cure; which we have said was in that continued Epilepsie as also somtimes in a Catalepsis, but seldom happning, a certain malignant, melancholly, and poysonous humor, consisting in the hidden parts of the body, of the Veins, about the inward parts of the body, or also the outward parts, and otherwise lurking in the habit of the body or also within the Skul arising from some fault that doth not yet destroy the brain, but by course affecting the Nerves, but of a milder and Shorter Epilepsie, certain evaporations proceeding here and there from the inward bowels from a Cause less persevering and somtimes also Pains or only Troubles, when though they have no such great cause, in weak Children, yet they may produce Epileptical fits, but of the rest of Convulsions which are Short we said the internal causes were a poysonous humor, also in the Veins in Feavers, which these Convulsions do follow; or otherwise Acrid, Pernicious cholerick or serous humor, or blood corrupted, or it depends on the taking of things destructive or poysonous, or proceeds from grievous pain, either from a Wound, or the biting of Beasts.

In all which species since they are all difficult, we must not rashly foretel any thing of good, although a fit cure and benefit of nature doth somtimes mitigate the Prognostick: to wit, The long continued Epilepsie so called, if it begin before the time of youth, and cease not when that time comes, viz. when men can eject seed, or when women have their courses, as also that which first begins after youth is Incurable and desperate which will afflict them to the last day of their lives for a long time, unless the cruelty of the symptomes doth make death more speedy; but from the Shorter Epilepsie that Convulsion which is called the Worse is deadly, and that also which is called the Milder species, wants not its danger.

Which things since that they are thus, these Prognosticks being premised, the Cure must nevertheless be attempted, which we shal not first of al divide according to the Causes seeing they are so various and abstruse, but proceeding by the manner of operation we shal explain how by medicines emptying and altering found out partly by Use and partly appropriated to the Cause for some Reason, we ought to heal Epilepsies and Convulsions or at leastwise to keep off or mitigate their fits.

Evacuating Remedies are those which do carry another way the Causes procreating or Fomenting Convulsions, whether they be vapors or humors, either by revelling and deriving from the part affected, or by Repelling and hindring them to come to the part, and that either by opening made by Cutting, Sucking, Burning, or by Purgations ordered by divers passages of the body, or by other operations outwardly applied.

Amongst the kinds of Cutting, Phlebotomy presents it self for the lessning of the blood, which in a long continued Epilepsie wil take place, if the Patient be Plethorick or the Hemrhoids which before were accustomary, be suppresst, some general eminent and appearing Vein being made choyce of for this purpose; yet many

many do advise to open the Shoulder-vein called the Cephalick for the heads sake, also blood taken from the Veins of the Ham and Ankles is very convenient, and so much the more if the Courses be stopt in Women: the which also some commend if taken from the Veins of the Forehead and Tongue, and if we do conjecture its cause to depend upon malignant blood, these detractions of blood must be often repeated, whenas we have shewed that in Madness, in a Cause not very much unlike, this is the Principal Remedy; whence here also, if it proceed from corrupt blood this kind of Remedy often used wil profit very much, as also in a Catalepsis if it arise from the like reason, whenas 'tis sometimes cured by a Hæmothage flowing voluntarily from the Nose: But in other causes placed out of blood especially in bodies wasted with a long Epilepsie, and also in Convulsions following Diseases in which the strength of the Patient suffering the Convulsion is impaired by the cruelty of the Disease, it is no waies to be advised to draw blood, but Scarification is not unprofitably ordered instead of bleeding in Children and Aged, whenas we would rather turn the blood another way, then let it out, making it at those places where our intent is to draw the blood: and also a Paracenthesis, and Opening made by Setons and Trepanning by taking out part of the Skul-bone may be made tryal of in these desperate Diseases.

Sucking drawing forth blood is done by help of Leeches which being applid to the Forehead and the rest of the compass of the Head they write doth good in Curing of an Epilepsie, but especially when the Hemroids are suppreſt being fastned to the Fundament by sucking out this blood, which we can otherwise hardly provoke by any other Art, in this case they are very convenient.

Burning made both by an actual and potential cautery as in desperate Diseases it is the last Remedy, so here also the evil preserving, especially if the cause be in the Head it may at length not irrationally be applied, if by chance by this means the cause may be derived from the Nerves to the more ignoble parts; by which means 'tis reported that at *Florence* they are wont to burn the the Head of new born Infants to avert the Epilepsie which in those places is accostomary to Infants; for which causes and being moved by experience we think it not unadvised to attempt burning with a red hot Iron (the which whiles they are possest with the Fit, and are stupid we may act in them without any sense of pain) or by applying a Caustick to experiment the same, in a long continued Epilepsie if it reject all other Remedies; which some also do apply not only in that part of the Head, where the Sutures meet but also in the Neck and Feet: or if in some certain place an Air elevated doth cause an Epilepsie a Caustick applied to this part doth very much revel it.

Purgations by the appointed places of the body the Belly, Mouth, Nose, and Womb in Women are ordered divers waies; amongst which that dejection which is made by the belly carrying forth divers excrements, which is wont to be caused by the use of Purgers is diversly accomplisht according to the divers kinds of Convulsions.

For in a long continued and falling Epilepsie whenas in all long continued diseases there is plenty of excrements, that the body may be made pure it must be purged again and again by course, and as often as they are heaped up anew, at convenient times; first by washing the Belly, afterwards by preparing and bringing forth humors which give occasion of this affect. In which whenas Authors as it was said do so much vary, 'tis no wonder that also divers purging medicines are ordered by them, for many use above the rest *Phlegmatogoges* and those which draw Flegm from the head, who are perswaded that an Epilepsie is bred from that humor; others who hold that Yellow or black choller is the cause contend that amongst Purging medicine, *Cholagoges* rather, or *Melanagoges*, are more prevalent than the rest; but we as we find the body either stuft or polluted with humors do fit our Remedies to the drawing forth of this or that humor, making our choice of them from this especially, whether there be need of Gentler or Stronger Cathartick to expell the humor (ommitting that too scrupulous and obscure propriety and similitude of Cathartick with the humors) we choose those which are either more mild or more efficacious as the nature of the humor, and the strength and constitution of the body do require, and those which are approved of by the ancient and modern, especially in this case commended by the authority of *Dioscorides* of which sort for the Gentler we allow of Whey, Agarick, Seny, and for the Stronger Hellebore, and being according to the aforesaid intention, we think them conducible in an Epilepsie; but chiefly having a care, that when an acrid or malignant matter doth cause an Epilepsie we do not stir the body beyond measure, with too Hot or Acrid or too strong Purgers, and if the cause be doubtful or abstruse, that by too solicitously relying on the emptying of one humor according to the common opinion, we do not more weaken the bodies than help them, and also to the like fit Cathartick medicines those things must be mixed which by a peculiar vertue visit resist an Epilepsie, are proper to the Nerves, amongst which the juyce of Peony taken plentifully doth also loosen the Belly, and those things which do prepare to, if it have need of preparation) all which shall be explained in things that alter) and also those things which do open the Courses and Hemorrhoids if they be stopt, being mixt with them do procure that they are easier provoked, because the expulsive faculty is then forced divers waies.

But that we may demonstrate these things also by examples, observing this method in a long continued Epilepsie as also in a Catalepsis, we must thus proceed.

First of all the Belly must be moved, that the excrements and the filth mixt with them may be brought forth from the first passages, and that both before the use of Purgers and also sometimes in the Fit that they may sooner come to themselves, or by course also if the belly do not sufficiently answer your desire.

Which may be done by any Suppositories or by putting up these following. Take *of Honey, the juyce of Rue of each alike quantity*; boyl them and add towards the end *as much Salt as is sufficient, and a little powder of Peony root.*

Or cast in Clysters, First Laxative, then Stimulating, at last Stronger, appropriate both to the Brain and Nerves.

Of which sort this may be the chief for the Flegmatick. Take *of the roots of Lillies, fresh Peony, of each one ounce and an half; of round or common Birthwort, half an ounce, the herbs Mallows, Beets, Sage, Rue, the lesser Century of each one handful; the flowers of Lavender or french Lavender, Rosemary, Primrose, Chamomel, of each one pugil; Bran one pugil, Seed of Peony one dram and half, Carawaies one dram.* make *a decoction*, dissolve *of juyce of Mercury or Beetes Honey or Red Sugar of each one ounce; Hiera Picra and Logadij of each two drams; Oyl of Rue one dram and an half, a little Salt* make *a Clyster.*

The humor abounding is prepared *before Purging* as it is either *Flegmatick* or *Cholerick*, or *Melancolick*, giving what follows for three or four daeis. *The*

The Flegmatick after this manner. Take *of Syrup of Hyſop two ounces* ('tis very much commended in this caſe) *of french Lavender, Oxymel of Squils, of each one ounce, the waters of Betony, Piony, Hyſſop, Balm, of each two ounces*; mix them, aromatize it, or let him take *a convenient Lozenge*, by and by after the taking of it.

Or make *a Melicrate*. Take *of Hyſop, Calamint of each one handful*; *french Lavender flowers, red Cicers of each one pugil*; adding *Honey* boyl it a little.

Or *a Decoction*. Take *of the Roots of Peony, thick Galangal of each one ounce, Miſſleto of the Oak, Elecampane roots, round Birthwort, of each half an ounce, the roots of Graſs, Aſparagus, Liquoriſh of each one ounce*; *the herbs Hyſop, Betony, Balm, Calamint, of each one handful*; *flowers of french Lavender, Roſemary, Sage, of each one pugil*; *Aniſe, Fennel ſeed, of each two drams*; *ſeed of Baſil, Peony, of each one dram*; *Raiſons two ounces*, make *a decoction*, diſſolve *in one pound of the ſtreined Syrup, of Hyſſop, of Vinegar, of each two ounces*, mix it, make an *Apozem*.

Or *a Wine*. Take *of the herbs Wormwood, Groundpine, Germander, Calamint, Hyſop, the flowers of french Lavender of each alike*, infuſe them in *Wine*.

A melancholly humor wil be prepared thus. Take *of Syrup of Fumitory two ounces, of french Lavender, of Hyſop each one ounce*; *with the waters of Betony, Bugloſs, Fumitory, Hyſop as much as is ſufficient*.

Or this *Decoction* which wil be proper alſo in a *Catalepſis*. Take *of the opening Roots ſteept in Wine of each half an ounce*; *the roots of freſh Bugloſs one ounce, Peony half an ounce*; *the bark of Tamariſk ſix drams, the herbs Balm, Fumitory, Hyſop, the tops of Time of each one handful*; *of the Cordial flowers of each one pugil, the ſeeds of Parſly, Fennel, Carawaies, of each one dram*; *and in one pound* diſſolve *of Sugar as much as is ſufficient* make *a Julep clarified and aromatized with Cinnamon*.

If *a Cholerick humor* abound make it thus. Take *of Syrup of Endive, of Vinegar ſimple of each three ounces, the water of Endive, Sorrel, Peony, of each as much as is ſufficient*.

Or make this *Decoction*. Take *of the roots of Graſs, Aſparagus, Succory, of each one ounce, the roots of Piony, miſſleto, of each half an ounce*; *the herbs Endive, all the Capillary, both Bugloſſes root and all, of each one handful*; *Betony, half a handful, Violet flowers one pugil, Aniſe ſeed one dram and an half, Peony ſeed one dram, Raiſons one ounce, Prunes in number ſix*, make a *Decoction*, diſſolve *Syrup of Violets and Endive of each two ounces*, mix them.

The humor being prepared ſuch like *Purgers* may be adminiſtred, firſt of all in *a flegmatick body*.

The following *Potion* made of uſual *Electuaries* is effectual but bitter. Take *of the Electuary of Diaphœnicon three drams, Hiera of Coloquintida and Rufus one dram and an half, Syrup of Fumitory compound one dram, the waters of Hyſop and Piony as much as is ſufficient* make *a Potion*, in *ſtronger bodies* alſo *the ſhops Hiera Logadij* may be given.

Another with *a convenient decoction*. Take *of the roots of the Acorus, Peony, of each half an ounce, Liquoriſh ſix drams, Miſſleto of the Oak two drams, the herbs Hyſop, Balm Betony, of each two drams*; *the flowers of french Lavender one dram and an half, the flowers of both Bugloſſes of each one dram*; *Peony ſeeds two drams, Fennel ſeed one dram, Polipody, Senna of each ſix drams, Dodder of Time two drams, Raiſons one ounce*, make a *Decoction*, infuſe *Agarick one dram and an half, Ginger half a dram, and ſtrein it*, diſſolve *of the Electuary Hiera of Coloquintida one dram, or if they refuſe bitter things, of Diaphœnicon two drams, ſyrup of Roſes ſolutive one ounce*, make a *Potion*.

Or in the form *of Pills* after this manner; Take *of pills Cochiæ half a dram*; *Sine Quibus of Sarcocal, of each one ſcruple*; *with ſyrup of French Lavender, or Hyſop water*: Make *Pills*.

In the Cholerick and *Melancholy* the things following are more convenient; Take *of Polypody ſix drams*; *Senna half an ounce*; *Dodder of Time two drams*; *Fennel ſeed one dram*; *Piony Roots half an ounce*: Infuſe them *in Goats Whey*, Boyl them; Diſſolve *of Catholicon half an ounce*; *Confectio hamech two drams*; *Syrup of Fumitory, one ounce*: Make *a Potion*.

Or thus, Take *of french Piony Roots one ounce*; *the Herbs of Betony, Clary, Succory, Endive, Hops, of each half a handful*; *the Cordial flowers, Broom flowers, of each one pugil*; *Annis, Fennel ſeeds, of each one dram*; *Raiſons twenty, Prunes, Sebeſtens, of each ten*; *Polipody, ſix drams*; *Senna half an ounce*; *Tamarinds, half an ounce*; *Citron, Myrobalanes rubbed, with the juyce of Roſes, one dram and an half*: Make *a Decoction*, infuſe *choice Rubarb one dram*; *Spicknard one ſcruple*; Strain it, diſſolve *ſyrup of Roſes ſolutive, or of Fumitory, or of ſweet ſmelling Apples half an ounce*: Make *a potion*.

Thoſe things which are uſed *many times* either *continually* or *by intermiſſions* are preſcribed in theſe *forms*.

Such *a Syrup* may be made; Take *of the freſh Roots of Piony two ounces*; *the true Acorus Roots, Miſleto of the Oak, of each one ounce*; *round Birthwort half an ounce*; *Squil prepared, Pellitory of Spain Root, of each two drams*; *Fennel, Liquoriſh Roots, of each one ounce*; *the Herbs Hyſop, Fennel, Liquoriſh Roots, of each one ounce*; *the Herbs Hyſop, Betony, Sage, Marjoram, Balm, of each one handful*; *Rue, Time, Prim-roſe, Ground-pine, Endive, Hops, Fumitory, of each half a handful*; *the flowers of French Lavender, Roſemary, Burrage, Bugloſs, Broom, of each one pugil*; *Piony ſeeds two drams*; *Seeds of Rue, Fennel, Annis, Mountain Hartwort, of each one dram*; *Raiſons forty*; *Figs, Prunes, of each ten*; *Polipody, four ounces*; *Dodder of Time ſix drams*; *Senna, wild Saffron, of each three ounces*; *Agarick five drams*; *Rhubarb three drams or half an ounce*; *Turbith three drams*; *black Hellebore, thick Galangal, Nutmeg, of each two drams*; *Gingar, Spik, Cardamom, of each one dram*: Make *a Decoction according to art in water and a third part of Wine*, and add to that ſtrained *of the juyce of Piony Roots, and ſweet ſmelling Apples, of each two ounces*; *the juyce of Mercury one ounce*; *the juyce of Hyſop half an ounce*; *Sugar half a pound*. Boyl it to a conſiſtence, of which let him take from *one ounce* to *two ounces* with *Piony water*.

A Wine to be taken for ſome daies, may be made of the ſame things or fewer, Thus; Take *of Senna, one ounce and an half*; *Agarick trochiſcate, half an ounce*; *Turbith two drams*; *Pulp of Coloquintida half a dram*; *Tartar three drams*; *the Roots of Piony, Acorus, of each half an ounce*; *the herbs Wormwood, Hyſop, Betony, of each three drams*; *the leaves of Rue one dram*; *flowers of French Lavender or Lavender two drams*; *Fennel ſeed one dram and an half*; *thick Galangal two drams*; *Ginger one dram*; *Cardamome half a dram*: Bruiſe them, add *Wine* that they may be well ſteeped; let him try the quantity of one draught, and drink it for ſome daies after.

A uſual Electuary may be made, thus: Take *Hiera of Coloquintida one ounce*; *Diaphœnicon half an ounce*; *Diacarthamon, Diaſena, of each two drams with Syrup of French Lavender and Hyſop*: Make an *Electuary for your uſe*, beginning *from two drams*.

Or in form *of Pils*. Take *the ſpecies of ſimple Hiera half an ounce*; *Agarick two drams*; *Rhubarb one dram and an half*; *black Hellebore one dram*; *Trochiſks of Albandal two ſcruples*; *Lazulus ſtone prepared one dram*; *the pulp of Piony ſeeds, Arabian Sachas, of each one dram*; *Caſtor ſix grains*; *Salt Gem one ſcruple with ſyrup of Hyſop*: Make *a Maſs*: Let him begin *with half a dram*.

In *the Gentler* called *the Childrens Epilepſie* we muſt uſe *Purgers* alſo, but *the gentleſt*, becauſe it is not ſafe to purge *Infants* or *great bellied Women*, with ſtronger, which ſeeing

ing they are vehemently hot, in those they would too much inflame the body and in these they would expell the Child:

Therefore *the Gentler* of the aforementioned may be made use of, or if they be *Infants* stil, because they refuse ingrateful and bitter things, we may give *sweet things* as *Manna*, or *Cassia with Sugar*; or give *Milk in which Roses, Violets, Senna, and the like* have been boyled; but if they suck stil, let the Nurse also be gently purged, that the Milk which they Suck may be less excrementitious.

To others give of this *Confection of Raisons*, which is thus prepared convenient for this case. Take *of the Leaves of Senna one ounce, Agarick, Peony roots of each half an ounce*; *Hyssop leaves two drams*, infuse them in *water* and boyl them a little, strain it, then put to it *one quarter and an half of Raisons* boyl them again and strain it, and boyl it to the consistence *of Honey*, give first one dram making tryal according to the age.

A Pouder also may be given which is thus. Take *of Tartar two drams, Diagridium half a scruple, Anise one scruple, of Peony root half a dram, Sugar six drams*; give *half a dram.*

But especially if *the Epilepsie* do arise from *Worms* those things must be made choice of, which besides that they do purge, may also kil *Worms* of which sort are *Aloe, Rhubarb*; and we must mix with them, those things which resist *putrefaction* as are *the juyces and seed of Citrons, Lemmons, Harts-horn and Corals*, and those things which resist an *Epilepsie*, as *the root and seed of Peony, Misileto of the Oak* and the like, and they are given in the form of Pils, or Pouders, or Lozenges.

Pills are very convenient by reason of the Aloes if they can swallow them, such as these are, Take *of Aloes, Rhubarb each one dram; Wormseed, Coraline, the pulp Peony seed, of each half a dram*; *Diagridium six grains*, mix them up with Syrup of Lemmons, make little Pils, let him swallow them.

For the most part they are more pleased with Lozenges which may be made thus, Take *of Rhubarb one dram and an half, Wormseed half a dram, the pulp of Citron and Peony seed, the shavings of Harts-horn, Ivory of each one scruple*; *Coral two scruples, Misileto of the Oak one scruple, Diagridium half a scruple, Sugar dissolved in Purslane water*, adding *the juyce of Lemmons or a little Vinegar to one ounce and an half* make *Lozenges*, let him take for *one dose one dram.*

But in the *worser Convulsion* which casts down the strength already weakned by the cruelty of the Disease which it follows, or whose cause hath a sudden progress from things external; to enervate the body with Purgers is either superfluous or dangerous; yet if it happen after pains of the Collick from the same humor not yet, or not sufficiently purged forth, then with one and the same labor, by purging we shal provide against the Colick pains and Convulsions arising from thence; amongst which Clysters for the most part performing both, are commended above the rest (although the common people do evilly think that by use of them the Convulsions and Palsies do happen which are wont to follow those Colick passions) the which also being used in other evil Convulsions in which otherwise we ought not to use Purgers, they are to be preferd before all other forms of Purging, because they revell, and in the interim do not too much offend nature.

Amongst the kinds of Evacuations which are made by the Mouth, and Nose a Vomit wil help them, when the Epilepsie hath its rise or increase from things taken, or other repletions of the Stomach; which also in the Fit it self being caused by thrusting down a Feather into the Throat, or by other means, doth make the Fit shorter if Vomiting do follow.

The which also may be done by Sneezing caused at the same time (the which as it doth somtimes go before the falling in an Epilepsie so somtimes it ends it) the which is commodiously moved in this case, by blowing up of Pellitory of Spain into the Nostrils or with this following pouder, Take *of the roots of white Hellebore half a scruple, Pellitory of Spain, Pepper, of each one scruple, Peony root, French Lavender flowers of each half a scruple*; make *a sneezing pouder.*

Errhines put up into the Nose wil do the same, such a one as this may be, Take *of the juyces of Rue, Sows-bread of each two drams, the juyce of Peony one dram, Castor, Gall, of each half a dram*; *Honey one dram*, make it like a Liniment for the Nostrils: Errhines also when the Patient is out of his Fit being used by course, will yeild some benefit if the head be stuft with flegm.

As also Spitting upon the same account caused much in a morning is convenient, which as *Dioscorides* teacheth is here profitably moved, by chawing of Pepper or by other Apophlegmatisms as masticating the following forms. Take *of Mastick half an ounce, Roots of Pellitory of Spain three drams, Cubebs, Mustard seed of each one dram*; *Root of Peony, Nutmeg, of each half a dram*; Make a Pouder, mix them with Wax and make Masticatories. They very much commend the root of Acorus candied and chawed a good while.

The Courses promoted through the Womb in the Fæminine sex, both by those things which are given by the mouth and those that are put up into the orifice of the Womb and applied to the Region of that, if the cause of the evil do lie in the blood retained there, they do oftentimes cure an Epilepsie.

Amongst those things which do it these Pills are very profitable, Take *of Agarick trochiscate, Aloes of each one dram*; *Rhubarb one dram and an half, Myrrh half a dram, Castor one scruple, the pulp of Peony seed half a scruple with the juyce of a Leek* make Pills; let him take from half a dram to a dram at midnight.

Also such a Pessary put up doth powerfully move the Courses, Take *of the root of Orice, the seed of Gith, of each one dram*; *Electuarium half a scruple or Coloquintida one scruple, Castor half a scruple*, mix them with Honey, the which let them be boyled to a convenient thickness with some part of juyce of Sows-bread or Mercury, and make Pessaries.

To move the Hæmorrhoids by things given and applied, is a singular Remedy, if the cause of the Epilepsie lie chiefly in the mesaraick Veins as was said; the which also may be done by Leeches, and other Remedies expresst in their place.

Amongst the other operations which are outwardly performed for Evacuation sake, both in the Fit and out of it, the application of Cupping-Glasses is numbred, which somtimes are applied to the hinder part of the Head, somtimes to the Shoulders, somtimes to the Hypochondries, somtimes to the Groyns for diversion; as also frictions of the extream parts, by all which revelling vapors and humors from the nerves we make the Fits both fewer and shorter; and also *Galen* on his Epileptical Child hath committed to memory upon experience, that a certain Air giving cause to an Epilepsie from some part which may be bound, if ligature be made above the Rise of it, it may be hindred that it shall not run forth to cause an Epileptical Fit: as also some do testifie, that by Repellers outwardly applied to the Head the same succes hath somtimes been.

The altering Remedies which are applied in the Cure *of Convulsions*, are fetcht from things which do resist the malign ty

lignity of their Cause by a certain *Propriety*, and that rather by *an occult* then *manifest* Propriety viz. by which they are adverse to an *Epilepsie* in generall, from what cause soever it is raised; or they are *alexiterial* the which whether an *Epilepsie* or *Catalepsis* proceed from some *venenate quality*, are contrary to such kind of *Poysons*, or the which helping *the Nervee* do effect, that it is not so readily affected by the Cause, and that because they render it firm *by strengthing it*, or smooth it *by lenifying* or make it impatible *by stupefying it*; or which altering *the whol Body* do change its Constitution which was prone to an *Epilepsie*.

Use hath found out and approved of many *Remedies* that do drive away an *Epilepsie* by a certain *Propriety*, as are *Piony, Misleto of the Oak, the Skulls of a Man, an Asse hoof, a Swallow, and many other* such like *helps* explained in the *Remedies*; which though they may be used in all Causes of it, yet whenas besides this Vertue they are also either *hot* or *cold* or *temperate*, although they use them confusedly without respect to these we think it more advised, that they ought to be selected according to the Nature of the Constitution of *the Patient* or *the Disease* and this or that to be preferred before the rest; what things do return *the venenate quality* inducing an *Epilepsie* or *Catalepsis*, besides those which we have said already do by a propriety resist an *Epilepsie*, and what *Antidotes* are privately adverse to this *Poyson*, (as in other *Poysons* there are found those things which do resist them,) hitherto no Experience hath found them out which can readily and quickly do it: wherefore if *the Epilepsie* be from a *poysonous Humor or Vapor, those common Remedies Alexipharmacall* which in generall are adverse to all poysons, as *Treacle and the like Compositions* as they are used in all *venenate* aud *pestiferous Diseases*, so also in these cases being mixed with those things which by a propriety resist *the Epilepsie*, they are given to destroy and correct the cause thereof; and if *Poyson from without by the blow of a Beast, or the biting of a mad Dog entring into the Body* hath caused an *Epilepsie*, we cure the same with things *alexiterial*, as the rest of the Symptoms arising thence.

Those things which add strength to the Nerves are appropriate Remedies, which being repared of capital and arthritical Simples, Sage, Rosemary, Marjoram, Bettony, French Lavender, Primrose and Ivy, are good in the *Palsie* and other *cold and moist Diseases of the Brain*, which seeing they furnish *the Nerves* as it were with new forces, that it may the stronger resist those things which do molest it, they are wont not unprofitably to be added to the rest of the Medicines which we use in an *Epilepsie*, but not for that end or intention, but because they beleeved that an *Epilepsie* was caused by Flegm obstructing the Brain, they have applyed not only these *hot things appropriate to the Nerves*, but those things which are *moist, hot* that the *thick Flegm* might be cut aud attenuated, *Castor, Euphorbium, Pellitory of Spain, Squills and divers Spices*, for the most part *Remedies* in the Cure of an *Epilepsie*; the which notwithstanding we, if *an Epilepsie be from an irritation of the Nerves*, because they do more inflame the Body, as we do no wayes see it is cured by these things, so we have known by Experience that they do irritate more, promote and exasperate its fits; and therefore whenas we have either found or received from apvroved Authors and worthy of Belief that they do more hurt by their heat then they can do good, unless *in a cold and moist Constitution of Body* or when they are furnisht with *another Propriety* above, by which they resist *Poyson* or *this Disease* we think them otherwise not rashly to be administred.

Of which sort for Examples sake we will describe *the more choice Remedies* from the Observations of the Ancients and modern, and our own, as well those *endued with an occult contrariety* as those *appropriate to the Nerves* or those compounded *of them both* together *in their different formes* in which are either *given* or proposed *for smell* or are *otherwise applied to the Body*.

Amongst those things which *are taken* many of *those appropriated* many be used amongst *Nourishments* as *the brain of Swallows, Kites, Daves, Cuckows, Chickens, Hare* eaten. The rest which Nature abhors and which are not accustomary we omit, as *Blood drunken up hot from a man killed*, which the Common people so much approve of; *dry Figgs* also are commended *Plantane with Lentil, the Topps of the black Vine* as *Dioscorides* teacheth the which may be taken with *Vinegar* and *Oyl*, as also *Capers* which *Fontanous* so much commends; and if *the Meats* be sauced with *Hysop, Sage, Marjoram and other simples appropriate to the Nerves*.

Amongst things *medicinal* this *Drink* may be given: Take *of the Roots of Piony one ounce, of Misletoe of the Oak half an ounce, the Roots of Asarabacca, Birthwort each two drams, Piony seeds one dram, Anise half a dram, Channels bey ge scruple*: make *a Decoction in Broth, or Wine and Water or an appropriate Water*, dissolving *Honey of Squills half an ounce*, make *a Draught*, give it when *the Fit* is feared.

In plethorick Bodies this *Decoction* may be prepared; Take *of the shavings of Guaicum half a pound, Misletoe of the Oak a quarter of a pound, Piony root one ounce*: boyl them in *twelve pound of Water to the consumption of a third part*, let him drink it instead *of wine* or *allay wine* with it.

They put into *the Mouth* in *the fit, the juyce of the greater Housleek or Rue* presently prest forth, sometimes adding a little *Castor*.

Or such like *Medicines* may be thus prepared, that they may be alwaies ready *for use*. Take *of the juyces of Misletoe, Rue the greater, Housleek, blessed Thistle each two ounces, of Sage, Marigolds each one ounce, Sugar four ounces*: boyl them *to the consistance of a Syrup*, let him take often one or two spoonfulls.

A Syrup of Piony may be made *for use* after this manner, *of the juyce of Piony six ounces, Honey of Squills an ounce and an half, Vinegar of Squills half an ounce, Sugar two ounces*: boyl them *to the consistance of a Syrup*, 'tis laxative, and because somwhat sharpe, by so much the more pleasing: *Syrup of Succory* is much commended for Children.

A Compound one may be made thus; Take *of the roots of Piony one ounce and an half, the Roots of Eringoes, Dropwort, white Dittander, Birthwort each one ounce, the Roots of Masterwort, Pellitory of Spain, Squills prepared each half an ounce, Misletoe of the Oak six drams, the herbs Hysop, Sage, Marjoram, Rue, Bettony, blessed Thistle, Ground pine, Germander, Mulfoil, Cinquefoil, St. Johns-wort, Plantane, white Vine each one handful, Flowers of French Lavender, Lavender, Violets, Clove Gilliflowers each one pugil, Piony seed three drams, of Rue, Trifoyl each one dram and an half, Anise, Fennel seed each two drams*: make *a Decoction* and *to that strained* ad *of the juyce of the Roots of Piony and of Hysop each two ounces, Honey of Squills three ounces, Sugar five ounces*, aromatize it *with Cinnamon two drams*, and make *a Syrup* boiled decently that it may keep, of which let him take often from *half an ounce to one ounce* by it self or dissolving it with some convenient Liquor.

A Wine may be prepared in a Vessel from the same things and *infused in four* or *six measures of Wine* or the same may be done with fewer of them, either if you put *in Wine, Guaicum shaved, Misletoe of the Oak*, adding *Piony root*, as was said formerly of *the Decoction*, or if you give *the Wine of Squills* as *Dioscorides* teacheth.

There are *usual Waters* prepared for these Uses, and refer-

reserved, which either a part or mixt may be made after this manner. Take *of the waters of Piony flowers, Lilly of the Vallies, Linden-tree, black Cherries ripe each half an ounce*, give it from *half an ounce to one ounce in two ounces* of which *Water* if you infuse *one scruple of Castor* it will be more effectuall, and much more if you add so much *of Assa fœtida*, the which notwithstanding by reason of its stinkingness is scarcely admitted by the Patient unless *in the fit* being then stupid.

A most effectual Water made up of divers things may be prepared thus; Take *of young Swallows fifteen, the Daws, Cuckows young ones four* or if they cannot be had, *Swallows twenty five, of Mans or Goats Blood three ounces, the skull of a Man one ounce, Castor half an ounce, Piony Roots one quarter of an ounce and of the seed one ounce, Squills prepared two drams, Misletoe of the Oak, half an ounce, the herbs Rue, Hyssop each two handfuls, Bettony, Marjoram, Sage, Rose-flowers, Lavender one handful, Cinnamon two drams, Cloves, Cubebs, Pepper each one dram, the most excellent Wine or Malligo three pound, the water of Lilly of the Vallies, and the flowers of Linden-tree each two ounces, Aqua vitæ one ounce*, let them steep only a few hours that they be not corrupted, then distil them; it is given from *half an ounce to one ounce* for prevention, the which *Water* also given *in the fit* doth rouze them up, and the sooner if you infuse *Assa fœtida* in part of it, as was said before.

Another may be prepared *out of Blood* after this mannir. Take *of the Blood of a Man newly killed, or gathered from a Vein opened in a sound Man half a pound, fresh Piony Roots sliced two ounces, Piony seeds half an ounce, Hyssop, Rue each one handful, the Skull of a Man one ounce*, draw forth *a Water* presently whiles it is hot, of which give *one ounce* for prevention.

Pouders are made thus; Take *of the Root and seed of Piony, Misletoe of the Oak each one dram, Marjoram, Nutmeg, Anise seed each half a dram*: make *a Pouder*. You may add *of the Skull of a Man powdered one dram*, and if there be *worms in Children, Dittander root, shavings of Harts Horn each half a dram, Wormwood and Purslane seed each one scruple, Coral half a scruple*: make *a Pouder*, give it by it self or adding *of Sugar* make *a Tragem, or Lozenges, the Sugar* being dissolved *in Piony water or other*.

Or thus, Take *of a Mans skull one dram, an Asses hoof, Swallows ashes each half one dram, shavings of Ivory one scruple, red Coral one dram, Pearl prepared half a dram, filings of Gold one scruple, Piony seed half a dram, Diamoscum one scruple*, (which *Pouder* is thought appropriate for curing *an Epilepsie*) make *a Pouder*, there may be added *as much Sugar as is sufficient* and *the Pouder* remain, or it may be reduced into *Lozenges with some convenient water*.

Electuaries and Conserves are made thus; Take *of the Conserve of the flowers of Peony, and french Lavender, Rosemary, Sage, Betony each one ounce; Conserve of the flowers of Succory and Violets each half an ounce; of the roots of Peony and its seed one dram and an half, Roots of Pellitory of Spain, Leaves of Hyssop, each one dram; seeds of Basil half a dram, a mans Skul one dram, with Honey of Squils as much as is sufficient*, make an Electuary.

Or thus, Take *of the roots of Peony, Pellitory of Spain, each one dram an half; Hyssop, seeds of Peony each two drams; Honey of Squils as much as is sufficient*, make an Electuary.

Galen doth very much comend a Remedy made of Squils which wil be more proper made thus, Take *of fresh Squils sliced, the choicest Honey each half a pound; add to it of the pouder of Peony root one ounce, and of the seed half an ounce, the root of Pellitory of Spain one dram, Misileto of the Oak, Leaves of Hyssop, Rue, Agarick, each two drams; the skul of a man three drams*: let these be receiv'd in a Glass shut up and suffered to steep in the heat of dung or of Sand in the Sun for fifteen daies daies, afterwards give the Juyce prest forth by it self, or let it be first gently boyled, that it may be kept for use, let the Patient take one or two full spoonfuls twice or thrice in a week.

Or thus make a Remedy composed of divers things, and as it were an Antidote against the Epilepsie, Take *of the roots of Peony, Misileto of the Oak of each two drams; Roots of Tormentil, Round Birthwort, Dropwort, Cinquefoil, Dittander, of each one dram; Squils prepared one dram and an half, Agarick, the Leaves of Hyssop, Marjoram, of each two drams, flowers of french Lavender, and Lavender of each one dram; Peony seeds one dram and an half, seeds of Clary one dram, seeds of Hartwort of Candy, Basil, Cresses of each half a dram, Cinnamon, Cubebs, Cardamom, Nutmeg, of each one dram; Long Pepper, Ginger, of each half a dram, Pouder of sweet Diamoscum, two scruples, Pleres Archouticon, cold Diamargaritum of each one scruple, the Skul of a man poudered half an ounce, Asses hoof two drams, Swallows and Cuckows ashes of each one dram and an half; the shavings of Ivory and Harts-horn, of each half a dram, a Hares Runnet two drams, Benjamin, Mastick, Ammoniacum dissolved in Vinegar of Squils of each one dram; with Hony of Squils* make *an Electuary*.

Or those things which resist Poyson in general, and privately the Epilepsie, and do somwhat dull the Sense, make an Opiate thus. Take *of old Treacle three drams, the root and seed of Peony Misileto of the Oak each one dram; seed of Clary, Basil, of each half a dram; the Skul of a man two drams, with Honey of Squils or Syrup of Poppy* if you would stupefie more, make an Opiate, give one dram at night to him going to bed.

In form of Pils ingrateful things are given for prevention after this manner. Take *of Castor, Assa fœtida of each half a dram; Gum Ammoniacum, Sagapen dissolved in Vinegar of Squils of each half a scruple; the Gall of a Bear half a scruple; Oyl of Amber* (which is highly commended of the Chymists) *four drops, with the juyce of the root of Peony*, make a Mass: give him half a scruple going to bed.

The same things dissolved in the juyce of Rue put into the mouth whiles they are possest with the fit, do shorten it, as also Castor alone mixt with Oxymel, anointing the inner parts of the mouth with it; the which also done with Gall doth very much help, whenas these ingrateful things by powerfully moving the sense of tasting do cause that they come sooner to themselves.

Upon the same account Odors and Suffumigations are applied to the Patient to smel to, which though they do oftentimes further and discover Epileptical Fits, yet by discussing them, as they say, especially put into the Nostrils in the Fit, they make them shorter, and rouze up the Patient.

This is chiefly performed by Castor, Assa fœtida, Galbanum, Rue applied to the Nostrils which are endued with a stinking and strong smel.

Or make a Suffumigation of these things following, Take *of Ladanum two drams, Benjamin, Styrax Calamite, Mummy* (by reason of the Bitumen) *Mastick of each one dram; seeds of Gith, Peony of each half a dram*, make a pouder, burn it upon the Coals.

And also out of the Fit the Chamber may be fumed, yet with things not too much stinking.

And carry a Pomander, and smel to it often, which is made thus, Take *of the roots and seeds of Peony each three drams; Leaves of Hyssop, Rue, seeds of Gith, Coriander each one dram; Ladanum half an ounce, Styrax Calamite two drams, Gum Ammoniacum* as is sufficient make a Pomander.

Of things applied to the Head, Pouders may be sewed in a Cap which they may wear a nights, or be applied

ed in Bags or put into Pillows uſed to lie under their head, or the hairs of their head being firſt anointed they ſtrewed on them.

Such a one as this is, Take *of the roots of Peony two ſcruples, Cyperus, Orrice, Miſſleto of the Oak each one dram and an half; Rue, Hyſop, Marjoram, Coriander ſeed prepared, Peony ſeed each one dram; ſeeds of Baſil, Gith, each two ſcruples; Cloves, Red Roſes, Lavender flowers, each half a ſcruple; Gallia Moſchata one dram,* make a Pouder.

Or thus, Take *of the roots of Orrice two drams, Galangal, Cyperus, each one dram; Nutmeg, Cloves, each half a dram; Leaves of Marjoram, Balm, each one dram; flowers of Lavender, Roſemary, Roſes, each one dram; Dying berries half a dram;* make a Pouder.

The Head being firſt ſhaved is anointed with theſe things following, Take *of the Oyls of Chamomel, Lillies, Elders, each one ounce; Aqua vitæ one ounce,* mix them together.

The Head alſo muſt be fomented with things moderately hot, as with this Fomentation, Take *of the roots of Marſh-mallows, white Lillies, each one ounce; herb Mallows two handfuls, Betony, Sage, Marjoram, Balm, each one handful; flowers of Chamomel, Elder, Roſemary, each one pugil; ſeeds of Flax, Fænugreek, each half an ounce; Caraway ſeed; one dram,* make a Decoction in Water and Wine or in a weak Lye, for a Fomentation or Lotion of the Head.

Repelling Oxyrhodines are applied to the Head if it be from Vapors. Or this moſt fine Pouder is ſtrewed on the Hairs, Take *Coriander ſeed prepared two drams, Myrtle berries, flowers of red Roſes, Maſtick, red Saunders, the root, of Cyperus and Peony each one dram, of Cloves, Roſemary, flowers each half a dram;* make a Pouder.

If the Back-bone be anointed with Oyl of Lizards 'tis good, or with other things ſtrengthning the Nerves, as was ſaid in the Remedies.

Alſo the following Plaſter may be applied to the Region of the heart and to the Pulſes, Take *of Treacle or Mithridate half an ounce, the Roots of Peony, the Leaves of Rue bruſed each two drams,* mix them with Vinegar into a body.

Add this applied at the ſame time to the Region of the Neck will do good.

Lotions of the extream parts or Baths made of Plants appropriate for an Epilepſie, and for the Head and Nerves, as of Peony, Rue, Hyſop and and other things as was ſaid in the Remedies will benefit much.

The uſual Amulets that we hang and bear about, for the moſt part are, Peony, Miſſleto of the Oak, Elks hoof, the reſt have been explained in the Remedies.

But thoſe Remedies which by Lenifying do aſſwage the Nerves as they are profitably applied in all kinds of Convulſions ſo eſpecially when there is great danger imminent from the Nerves ſo much affected, by reaſon of the vehemency of the Cauſe, to wit, in thoſe which are called The worſer Species of Convulſions, which by their moderate heat, humor and temper by Moiſtening and Mollifying may Relax and Refreſh the contracted and convulſed Nerves, many of which ſort are explained in a particular Convulſion in which the Muſcles with the Nerves are truly bound up.

Which for the moſt part are applied outwardly to the Back-bone where is plenty of Nerves and their original, by anointing Oyl of ſweet Almonds, of Violets, Butter, Mucilages and the like; and by application of Cataplaſms ſuch as are prepared of Mallows, Marſh-mallows, Oyl of Violets, and the flower of Flax-ſeed.

Or they are adminiſtred in form of a Bath, moiſt, Fat, and Warm, in which let him ſtay a while, in which Mallows, Peony, Chamomel, and other things may be boyled.

Or they apply them to the Head alſo, embrocating them with Milk, eſpecially in Infants, for which Cauſe their Mothers do milk out the warm Milk from their Breaſts upon their Heads; or by anointing it with Oyl of Violets.

The ſame alſo is done by benefit of emollient and moiſtning Glyſters.

And by giving fat things with the meat or Medicines, as freſh butter, and Oyl of ſweet Almonds drank plentifully, which is counted a ſingular Remedy for Convulſions; upon which acount *Dioſcorides* commends the drinking of Whey and the Decoction of Violets, the Syrup alſo is approved of in Children, and Almond Milk is profitably given to drink, to which may be commodiouſly mixed an Emulſion of Peony ſeeds, of which a Lambitive being made by adding of Sugar, and given to the Child before it be ſuckled, is made a a profitable Preſervative againſt the Epilepſie as ſome write.

Things that ſtupefie the Nerves, becauſe by dulling their ſenſe, they cauſe them to be leſs affected with their trouble when they are irritated, and for that reaſon are not ſo eaſily convulſed; if the Gentler of them be given in Grievous and Dangerous Convulſions which proceed from an acrid and malignant matter, I have often found by experience they have done very much good; upon which account I think Treacle and other Opiates to be convenient in Convulſions (which in this caſe practitioners allow of to ſtrengthen and heat the Nerves) not only becauſe they do infringe the poyſonous cauſe of an Epilepſie, but becauſe alſo they do in a manner lay aſleep the Exquiſite ſenſe of the Nerves.

Experience hath proved that thoſe things which do change and alter the conſtitution of the whol body, and make as it were its Temperament new as in many long continued deſperate Diſeaſes, ſo alſo in a long continued Epilepſie and otherwiſe incurable they may ſomtimes do ſomwhat ſingular: which are perfected by great changes and new evacuations, made in the body.

By change of Age it ſomtimes happens, whenas the temperament of the body either is changed too, as that which invaded in Child-hood is cured when Youth comes; and that which firſt happens to thoſe of ripe age, if it ceaſe not in old age, yet it undergoes ſome change; ſo alſo the change of the Country, eſpecially if it be from a place where this diſeaſe is Popular, or otherwiſe from an unhealthful to a healthful place, it brings much help for the cure of this evil; and a change of the ſex as it were, which by eunuchiſm makes the body which was virile and maſculine to be effeminate, done by the ancients by Gelding, hath been commended as the laſt Remedy in an Epilepſie.

New and not yet accuſtomary evacuations eſpecially thoſe natural ones of ſeed and blood coming at their due time, whenas they do alſo very much alter the body, 'tis no wonder that if the years of youth beginning, the Epilepſie doth then ceaſe, not only by reaſon of the change of age, but alſo becauſe that then they begin to eject ſeed, and Maids have their menſtruous blood flow; and the Hæmorrhoides breaking forth in ſome natures, the ſame ſomtimes ceaſes; and the Epilepſie forſakes Great-bellied Women after they are delivered and wel purged: the which whenas Phyſitians ſee ſucceeds well by theſe like Purgations which nature attempts, they alſo in a deſperate Epilepſie make triall of divers evacuations, ordered oftner by chance than method.

By reaſon of the Symptomes of which ſort we meet

with divers in the ſundry kinds of conſternation of minde, beſides the lawful cure which is due to removing the cauſe, the which being taken away they alſo ceaſe, preſently when they are urgent, we muſt adminiſter ſome things; the chief of which to which we ought to have reſpect, are *Suffocation, Falling, Violent motion, Sleep and Stupidity, Dotage, Weakneſs.*

From a ſuddain and unexpected fall the Apoplectick and Epileptick are in very great danger, by which oftentimes daſhing their head they are killed; or otherwiſe grievouſly hurt, unleſs by cuſtome, or a Vertigo going before, the Epileptical be forewarned of the time, and then by ſitting or lying do prevent their fall.

Danger of ſuffocation hangs over *thoſe that are ſick of a grievous Apoplexy* becauſe they are not troubled only by reaſon of breathing hindred, but alſo by an impediment that their Teeth being faſt ſet, and their mouth ſhut, the free paſſage of the Air is intercepted. Therefore their Teeth muſt be preſently opened and if they yeeld not eaſily they muſt be puld a ſunder by an inſtrument thruſt in by force, and keeping that between them we muſt have a care that they be not ſhut again, and it muſt be hard, that they do not bite it off, for which purpoſe either a bone or hard piece of wood will ſerve whatſoever we light on firſt (as ſpoones for the moſt part are moſt readily found for this uſe. whoſe handle may be interpoſed) the which if they cannot be thruſt in betwixt the Teeth already cloſed, they muſt be parted by a dividing Inſtrument made for that purpoſe, and by interpoſition of that as was even now ſaid they muſt be kept that they be not joyned, or if they cannot be disjoyned thus neither, then a Tooth or two muſt be pulled out; then the Body muſt be ſo placed that the Breaſt being leſs preſt may be moved more freely, yet we muſt not ſtir it too violently whiles we move it whence follows quick breathing, the which whenas they cannot ſo ſpeedily perform, they are ſuffocated, as it often happens for want of care.

We ſhall prevent the Epileptical from wounding themſelves, or otherwiſe hurting by that vehement commotion and Agitation of the Body, if by interpoſing ſoft Cuſhions, Clothes, we take care they hit not their limbs againſt hard things; for it is no waies ſafe either to hold them or to bind them, ſeeing the matter of the Epilepſie is ſhaken of and diſcuſt by motion; and becauſe in ſuch like Convulſions of the Body they bite alſo, and ſomtimes vehemently wound their Tongue, we muſt put preſently between their Teeth (before they be ſhut, not our finger, which ſtanders by offentimes raſhly do with danger, but an inſtrument; as this in the Apoplectical ought to be done for fear of Suffocation, ſo in the Epileptical to relieve the Tongue when as they are no waies endangered of ſuffocation; and if the Tongue be already laid hold on by the Teeth, we muſt ſuccour it with a dividing Inſtrument.

Sleep and Stupidity in theſe affects, if they continue long, or returne often do oppreſs the Native heat, therefore the Apoplectical alſo being taken with to much or profound Sleep and a vehement Stupidity they muſt be rouſed now and then, and hinder'd that they relapſe not, which may be done by moving the outward ſenſes with ſtrong objects that they may force and provoke the internal ones into act: thus the hearing is moved with crying in the Eares making a high ſound and noiſe; the ſight with much ſhining of light and fire; the taſt with bitter and ſharp things the ſmel with ſtinking things mentioned before, but eſpecially the feeling ſeeing it doth very much move the ſence, if it be done with pain in parts endued with exquiſite ſenſe, as in the Skin by pulling the hairs, Burning, Pricking, doth very much rouſe them up which alſo may be done by irritating the Noſtrils, which have an excellent ſenſe, with ordors and other things which move ſneezing too, by which the Body ſhaken is more rouſed up; as alſo if we ſtir up the Eyes with a ſuddain light, and prick them with other things that move Tears; alſo we may ſollicite the belly with ſuppoſitories to excretion, the throat with our finger, a feather to vomiting: of all which whenas they do at once revel and derive the cauſe we have already ſpoken formerly.

The weakneſs is not ſo urgent, that there is due to this any other reſtauration of ſtrength then to other Diſeaſes, by courſe of Diet or Cordial Medicines amongſt which notwithſtanding External things which are wont to be applied to the Region of the Heart and Pulſes challenge the firſt place, when as before they come to themſelves, they ſcarcely take any thing, and if the Diſeaſe be of long continuance, they muſt be reſtored with an efficacious courſe of Diet, and other means.

Chap. 3. *Of an Alienation of the Mind.*

The Kinds.

AN Alienation or error of the Minde is called a *Paraphroſyne* when they feigne judg and remember thoſe things which are not, as if they were, or thoſe things which are unlikly and beſides reaſon, and that either together or a part, whether this be done only by Cogitation, or they expreſs the ſame by words and deeds.

This for the moſt part coming from inbred Cauſes is a certain innate fooliſhneſs otherwiſe proceeding from external cauſes if from things taken tis called *Temulency*, if it ariſe from ſome vehement affect it ſhall be called *a commotion of the Mind*; but ſomtimes depending upon internal cauſes it is deſipiency, which happening either without a Feaver accompanying it, is Melancholly, or with fury is *Mania* or Madneſs, or coupled with a Feaver, tis called a *Phrenſie*, all whoſe accidents we ſhall explain ſingly.

Fooliſhneſs although it be not aſcribed to children only when they are yet deſtitute of Judgment, and old Folks who are ſaid to be twice Children (the which notwithſtanding is rather a weakneſs of Minde in them, then a depravation) but alſo to every Age and all men upon that account, that all their humane actions ſeem to be fooliſh as *Eraſmus* in his *Moria* *Brandus in navi Stultorum* have elegantly ſhewed it in all ſtates of men: yet tis properly ſaid of them who being borne truly Fools and Silly do preſently even in their very infancy give ſigns of folly by geſticulations beſides the cuſtome of other Infants, and do not eaſily obey, are blockiſh, ſo that oftentimes they learne not to ſpeak, much leſs to performe other Duties, in which any induſtry is required: which in ſome Countries is a common evil as they write of *Egypt*, and at *Bremæ* a Village off *Valeſia* as I my ſelf have ſeen, and in the Valley of *Carinthia*, it is wont to befal many Infants, which beſides an inbred fooliſhneſs, ſomtimes with an unſhapen head, a great and ſwel'd Tongue, being dumb oftentimes with a ſtrumous Throat, do ſhew a deformed ſight, and ſetting in the waies and looking upon the Sun, and putting little ſticks between the ſpaces of their Fingers, and variouſly wreathing their Bodies, with an open Mouth,

Fooliſhneſs

they

they move Laughter and admiration to those that pass by.

But *others on whom some mark of folly was first imprinted from their birth* or *afterwards*, although they rightly perform all other actions of their life, and in some things are able to do singularly well beyond others, and are strong in wit and excel in some Art, as of Painting, Engraving, Building, Musick, and others, yet betray their Folly by these things, that they willingly hear themselves praised that they tell and act ridiculous things, for which thing great men are delighted with their company, whom also by reason of the divers Phantasms that present themselves to them, they call Phantastical.

But *others yet more fools with divers Trifles, gestures and jests*, as 'tis said, do thrust forth their Asses Ears, some of which have in them vices not acceptable to all and those oftentimes grievous ones, which according to the variety of their natures they bring forth somtimes in Anger, somtimes in Fury, somtimes in Sadness, somtimes in other things, all which it were superfluous to express.

Temulency | *Temulency* or *Drunkenness* proceeding from *Wine* and certain *other things*, as shall be said in the Causes, and not yet going so far, as to cause *sleepiness* and *stupidity* of which we have already spoken, but going beyond the bounds *of Mirth*, in which Wine moderately doth cheer the heart of man, making them mad, according to the diversity of natures as afore was said also of fools, doth discover divers effects *of Temulency and Drunkenness*; whenas *some Drunkards* are rather like *to fools* in their profuse and immoderate laughter, laying open their folly by their laughing and cackling (whence is the Proverb, *By much laughing you may know a Fool*) also by prating, Singing, laughing, kissing, loving: but *others* do rather express *the manners of mad folks* by Clamors, Anger, Blows, Biting. *Others* are sad like *melancholly men*, Weep, talk much of Religion and Death, which desipiency of theirs for the most part *sleep* or *stupidity* following, as was explained there, it doth so far alay it, til rouzed up they return to themselves again being oftentimes forgetful of the madness that went before, and some time after being troubled *with a pain and heaviness in the Head* they do pennance for their *Folly*.

The Commotion of the mind. | *A vehement or lasting commotion of the mind*, arising from som *affect of it* as shal be said in the Causes, is likewise a species *of alination of mind* so much depraving it, that that it either acts or thinks many things estranged from reason: as is that *foolish* too much Joy with which being puft up they speak many and strange things childishly, and undertake them vaporing, and in laughing do cry for joy as the Comædian saith. Also that *short madness* in which *the Anger-strucken* do swear and are carried headlong, fearing no dangers that they may be able to revenge themselves, and then *that melancholy conceived out of sadness and fear*, which oftentimes is wont to degenerate into a true and lasting one, as shal appear in the Causes; and hitherto also ought to be refer'd *the pertinacious Phansie of them who are oppress with great Love* springing from a corrupt judgment & imagination, which doth so change men, that as he saith, you cannot know them to be the same; which doth not only make men mad but women also young men and old folks, which sort of madness they call by the name of *Heroical* because 'tis wont to happen to *Heroes* or rich men but very inconsiderately, whenas the pooreſt cannot scape *Cupids* darts; this *conturbation of the mind* is a certain *affection compounded of all* the other *passions of the mind*, whenas somtimes the effects of joy

Love is a Species of commotion of mind.

shine forth in it, somtimes of Sadness, somtimes of Anger, and nothing is more unconstant than Lovers, who that they may enjoy their love, become so thoughtfull, that they neglect things necessary for the body, as to take meat, to sleep, or other duties, who omitting weighty and serious businesses, or following them slowly, spend their time rather in Neatness, Musick, and other things which may please their Mistress: and when they perswade themselves that they can obtain somwhat of their love, breaking forth into profuse joy, they often speak many fooliſh and obscæne things, and act them too, and laying aside all shame somtimes commit filthy wickednesses, and fear not to expose themselves to grievous dangers; or if they despair of mutual love and good wil, they continually afflict themselves with mourning and lamenting, and by no means admit of comfort, they refuse good counsels, and express their grief by shedding of tears, often sighs, paleness (for every Lover is pallid) and pain of the heart with which they chiefly complain they are troubled; whose pulse also is instable according as their mind is raised or depress, and by beholding or remembring their Mistress 'tis raised & stird up (by which sign *Erisistratus* discovered love) or by despair it becomes languid and calmed: with which accidents being oppress, at last they fall into grievous Diseases and hasten their own death, or oftentimes in despair lay violent hands on themselves.

Melancholly | *Melancholly denominated from black Choler, is a species of alienation of the mind* in which *the imagination* and *judgment* are so perverted, that without any cause they are very sad and fearful, and they can alleadg no certain cause of their sadness and fear, but that which is of no moment, or that false opinion which they have conceived from depraved aprehhension.

As when they perswade themselves that they *are damned, that God takes no care of them, that they are not predestinated*, although in the interim they be godly and religious, and they fear the last judgment, and eternal punishment, which *horrible melancholly* (and oft times driving men to despair) is the most frequent species, in the curing of which I have ofentimes been much hindered, with which those that have been taken have oftentimes confessed to me with many tears, deep sighs, great anguish of heart and trembling of the whole body, that they have been stirred up to Blasphemy against God, to commit horrible things, to lay violent hands on themselves, to kil Husband, Wife, Children, Neighbours, their Prince, being moved with no *jealousie*, no envy towards them whom they intimately love, but are compel'd as it were against their will, and such thoughts do steal upon them whether they will or no, when in the mean time they cease not instantly to begg of God, that he would vouchsafe to free them from those wicked thoughts.

But *others* are very much troubled with the *terrors of death and the fears thereof*, whiles they falsly imagine with themselves, that they are out of favor with the Princes and Magistrates, and that they have committed somewhat, and are drawn to punishment; or who otherwise do highly fear death, which they fancy is even now hanging over their heads.

Others by other trifling falshoods conceived and imprinted in their mind, do deceive *themselves*, as he who thinking himself to be made an *Earthen vessel* gave way to every one he met, least they should break him with a touch: as some have beleeved themselves turned into *brute beasts*: and another who thinking he had *a very large Nose*, would not change this Opinion, til *the Chirurgeon* deceived him by a Counterfeit stroke, and shewing him

a piece

a piece of flesh, that he had cut a part of it. And as *that Woman who* was wonderfully grieved that shee was forced *every day to put on her cloaths and put them off again: and another woman* who as often as she though that when she was dead, her Husband would marry another Wife, she was transported to these accidents: *some* think they have *swallowed Serpents and Frogs* and that they carry them still alive in their body, or by other tricks are deluded; and they dream of many and wonderful things of this nature, which sometimes relating with a great deal of affection and grief, I have heard sometimes with laughter, sometimes with great admiration and Pitty: in all which cases they shew marks of sadness and fear, whiles they complain, cry, with many and continual tears, and do wonderfully exagitate both body and mind.

Otherwise they are *idle* and *silent*, being asked answer not, being driven scarce go forward, they love solitudes and shun the company of men which species for that reason is called *Misanthropia* from the hatred of men; and if hating the light, they covet darkness repair to woods, and hide themselves in lurking places and caves as the holy writ testifieth of *Nabuchadnæsor* then they call it *Lycanthropia* from the custom of Wolves, others *the wolfish melancholy*.

With which *perverse imaginations, pains and cruel tortures of mind*, those afflicted oftentimes not only many months, but years also, and at last overcome, unless they return to themselves and be helped by Counsel and Art, either they die wasting, or that death which before they feared they hasten to themselves by hanging or drowning, or by some other violence, as we have known many sad examples of this nature.

Which forementioned *passions of Sadness and Fear* as they do not produce equal effects in all, but do pervert the mind in some more in some less, so they do continually possess those which they have once invaded. Yet they have *by courses their exacerbations and remissions*, as we have, shewed also they did otherwise happen in continal Feavers for a cause contained in the Veins after the like manner; yet we have observed some to be thus troubled only *at certain times, as some season of the year* or *change of the Moon*, and especially *Women while they are with Child, or have brought forth*, or *have their Courses*.

Melancholy Hypochondriacal a Species.

There is also another species of it which they denominate from the place affected *Hypochondriacal Melancholy*, in which the forementioned accidents do often intermit and again return upon the same day, and those who are sick of it, as oft as they come to themselves, otherwise then the rest (who unless some other thing be joyned, do only complain of *a pain of the Head*, or sometimes of *a Heavineſs*) do acknowledg that they are truly sick, and though they scarce or seldome lie by it, and notwithstanding are able to undergo other duties, yet they complain perpetually *of a pain of the Hypochondries* especially in the left side (which they call *a pain at the Heart*) *a Heat, Pulse, Murmur, Belchings, Vomiting, Spitting, pain of the Head, Vertigo, a ringing in the Ears, beating of the Arteries*, and innumerable other affects which they feel, and sometimes Phansie to themselves; and they trie Physitians, desire Cure, and trie divers Remedies, and unless they be eased presently, they change Physitians and Medicines.

Madness.

Mania or Madness is so great a depravation of all the the Functions of the Mind, that they feign judge and remember most things falsly, acting not only as the mournfull an fearful Melancholick, but all things besides reason, and sometimes without fury they commit more modestly those things which they speak and do, but most commonly being turned to Madness, by their stern aspect and by their words and deeds they express the violence of their Minds, whenas they tell false, obscœne and horrid things, cry out, swear, and with a certain brutish Appetite they go about diverse things like beasts, and some of them otherwise unusual even to men; and especially some of them desire Venery very much; as I have seen it befal a noble Matron otherwise most honest, who did invite both men and dogs to Copulation by most filthy words and gestures. Moreover they strive to offer violence both to themselves and others, wherefore they pull out their hairs, tear their cloaths and sometimes hurt their own Body, by biting, and other waies, and unless they be diligently restrained with Bonds and Chains, the which they study to break with all endeavor, and be kept close in custody, where they try to break open the gates, and oftentimes by a certain industry digging their Pryson to make a passage for themselves, falling violently on the standers by, like Beasts they endeavor to scratch them, bite, strangle, kill.

Possession by the Devil a sort of Madness.

But some amongst these *maniacal* or *Melancholick* som times shewing forth these accidents *more vehement*, sometimes *more mild*, and also acting and speaking things preternatural and monstrous, do manifestly declare that they are *possessed by the Devil*, which for that reason they call *men possest* and *Dæmoniacal*: who besides the depraved actions of the Mind, as was said, are wont diversly as *the Divel* doth to impose marvellously upon Men, and to bewitch them, oftentimes they continue dumb for a long while; sometimes also they abstain longer from meat, then Nature otherwise could bear, yet without any hurt: and sometimes they so wreath their Body, bend and winde it, that as I have seen with my own Eyes, it could by no meanes be done Naturally without Luxations of the Joynts; or by guessing, prophesying, they divine and foretel things otherwise obstruse, or they speak with Tongues which they learnt not, neither understood when they were well, the Divel as it were speaking thorough their Mouth, the divers stories of which we could bring, we purposely omit.

Hydrophobie a Species of Madness.

There is also a certain sort *of Madness*, in which *those bitten by a mad Creature* are converted into the same *madness* with which the Creature was troubled: as if this be done by a *Dog* they bark like Dogs, or if it happen from *a Wolfe*, they howl and set upon those they meet to bite them, shunning the light and those things which are clear and bright, when as in them doth appear the Image of the Dog, by which they were hurt, instead of the proper figure of a man, as some would have it, and especially fearing water, and trembling at the sight of it, whence this Species of *Madness* is peculiarly named *Hydrophobia*, long exercising the man with a distension of the Nerves, and a Redness of the whole Body especially of the face, and with sweat, and at length killing him unless relcived.

Vitus dance.

Hither also is to be refer'd that horrid and wonderful but rare affect in which being struck with a certain mad fury of skipping, they continually desire to dances, which Disease they therefore cal *Vitus dance* from a Saint by invocation of whom they beleeve they are freed from it; which though some counterfeit that they may extort the greater Almes, or are therefore suborned that they may imprint the false opinion of the common people the more in the minds of men; yet there are some found of both Sexes, which indeed being possest with this evil are

carried

carried with an inordinate desire to dancing, as that no time interposed that desire to dance with others without any rest night and day not only for some daies but weeks also, and in the interim are scarce yet tired, but are wonderfully recreated and refresht, and unless they do so they are very much hurt; whence when they take meat by compulsion, or being oppresst with sleep they are forced a little while to cease from dancing, yet they do no waies obstain from the Agitation of their Body, and presently again laying hold on any body they sollicite them to dance; and that so long till at last their strength being wholly overthrown and feet bruised, comming to themselves again they feel an exceeding weakness, from which they can hardly be restored and made up again; an example of which I when I was a young man saw in *a Woman* here at *Basil* dancing thus a whol months space in a publique place for whom the Magistrate suborned certain persons, strong men, that should dance with her by turnes, seeing one was no waies able; and many writers do testefie, that it hath somtimes happen'd, and the common people also is wont to imprecate this as a known evil: and some *Arabians* have called it the dancing disposition of the Limbs, and would have it to be a Species of Convulsion when yet here is no Convulsion of the Limbs, but the Mind Alienated is carried and forced into this madness and perverse appetite, as also in other Species of Melancholly and Madness they are possest with a desire of other things. which after another manner appear also too horrible; as even now we said those who are bitten by a mad Dog are rather tormented with the fear of water, as according to the nature of the venenate cause these different accidents proceeds, as we shall say in the Causes: if so be that this inordinate dancing also do not proceed from the Devil, and befall men by way of punishment by Gods permission, because they have offended by dancing.

Dotage. *A Phrensie* is a *Dotage*, in which equally as in *Madness*, the *Mind* is wholly Alienated, yet more or less as the affect is great, the which also they make known after the same manner by words and deeds, now sporting it more pleasingly with Laughter, Jests and Trifles, now raving Angrily with Scoldings, Clamors, Blasphemies and desiring also to do hurt as the *Maniacal*: to whom this happens peculiarly, that because they think, that Flies, Locks of Wooll. Straws are before their Eyes, and divers apparitions do appear from their false Imagination, they endeavor to hunt them, pull them, gather them, drive them away.

A Phrensie is a Species of Dotage.

A bastard Phrensie is another Species of Dotage.

But besides these like faults of the Mind which are common to them with the *Maniacal* there is a companion another grievous hot Disease, especially a Feaver to which if a *Dotage* be presently coupled at the first invasion, this affect is called *a Phrensie*; if that come after the Feaver hath lasted a little while, and a pain of the Head also went before, about the state especially if the Feaver be continual; or if it come first at the beginning of the fit, or in the vigor, if the Feaver be intermitting then it is designed by the name of a *Bastard Phrensie*.

Therefore together with a *Dotage* which is somtimes very grievous somtimes more milde, as was said, the Symptoms also of a continual Feaver do concur, more vehement or gentler also as the feaverish heat offers it self greater or more pleasing, as are by Reason of the heat of the heart a swift pulse quick breathing and somtimes drawn with sighs by long intervals, faintings away, and by reason of the Natural parts enflamed, thirst, drinesss of the Tongue but especially by reason of the Brain over heated besides a Delirium, Watchings, Dreams, Suffusions, Vertigoes, which if the Brain be more vehemently inflamed, do present themselves more and more grievous, as shall be said in the Causes.

The Causes.

The Cause of every Alienation of Mind, is one Preternatural proceeding from an evil Spirit, the other Natural, a certain affect so affecting the Brain the seat of Reason, by it self if the Cause lie hid in that, or by consent if it be else where that the Functions of the Mind are rather depraved then impaired; but there is somtimes aquality working by an occult propriety, which doth it, the which seeing we are not able to explain, from the effect we will call one the drunken vertue, the other the poysonous: but otherwise it will be some Disease to wit a certain distemper of the Brain, of which sort is that abstruse and unknown one, whose high efficacy is sufficiently known by this, that it vehemently disturbs the Mind, but seeing that makes an evil of long continuance, and yet in the interim the sick do no waies lie by it, when nevertheless other manifest distempers of the Brain if they continue long, are very dangerous for hurting the Brain; certainly it is very difficult to be explained which we do certainly find that this comes to pass by reason of the Spirits of the Bain which are every where implanted in it, and connate and bound up to the substance of it, do call a to great Agitation and Confusion of the Spirits of the Brain and the other Species we would rather call a perturbation of them, or a mixture of them with a strange matter, then feigne such a distemper, which cannot cause that, as they write of the cold one: but a manifest distemper of the Brain, also inducing a dangerous Disease, may likewise cause it; of which sort is a vehement hot one, especially if it be joyned with a Tumor; and also a fault in conformation; also some speck or putrefaction found in the Brain, all which how they do Alienate the Mind, we shall express in order.

An Evil Spirit the Cause of those possessed.

An Evil Spirit the Devil, because he is the enemy of mankind, doth not only continually infest the Mind, the most excellent and as it were the divine Function of Man, and so trouble them, that acting many things evilly against the divine Law he leads them into sin; but also exagitating, bewitching with his Arts doth oftentimes induce a grievous Melancholy, or a Diabolical Madness, or altogether entring the Body, makes them called *the possessed* and *Daemoniacal* the which to dispute or enquire how it is done, is not our intent, (although *Matthiolus* that he might refer all these kind of Madnesses to black Choler, affirms that the *Cacodaemons* do this by Mediation of that Humor, in which he saith they have their residence) this surely is certain, that there were such also in old time, as divers Histories Sacred and Prophane do testefie, as also we can no waies deny but that they may be found in our Age too.

The Temulent quality caused by Drunkenness.

The Drunken Disposition so called because it assailes the Head, arising from the propriety of certain things, produceth an Alienation of the Mind, which they call Drunkenness or Temulency, this proceeds from those things, which according to the diversity of Natures, and as they are used

can induce Sleep and Stupidity and for that reaſon alſo are called *Narcoticks*.

Some of which taken inward do it, as Wine more commonly then the reſt, becauſe it is ordinary Drink, which cauſeth this ſpecies *of Temulency* called *Drunkenneſs* if it be drank too immoderate or ſtrongly, yet not ſo far as to cauſe a perfect ſtupidity; and that for this cauſe, becauſe by its propriety it lightly obſcuring the Senſes (whence is the beginning of Stupidity) amongſt which the memory for the moſt part is wont firſt to fail, by producing a certain oblivion of griefes and labours, it brings a fooliſh joy and that effuſion which happens with reaſon from Wine yet moderately taken; its heat moreover helping, by which at once heating and inflaming the ſpirits it doth to much exagitate the actions; which happens more powerfully from diſtilled Wine, becauſe its concenterd Vertue, and heat is greater, upon which account Country Fellows are wont to drink it in the morning, that afterwards they may be more chearful to perform their ſervices. This alſo the Juyces of ſome other Plants will do, if thoſe Plants be eaten, or their Juyce preſt forth be given or extracted by Decoction; as are *Hops* from which Beer takes its Vertue of foxing, and flies if they drink of it do dye taken with ſtupidity, *Hemp* alſo, whoſe Pouder if it be given with Wine, doth fox the ſooner; the *ſeed of Darnel* and *Gith* perhaps *the falſe Nigella* in Bread, which faults of Corn if they abound, the Bread made of theſe makes Men ſleepy, and by continual uſe hurts many every where, the which notwithſtanding they do not obſerve: and ſuch is *that Plant*, or rather the ſeed of it, a ſort *of Millet* called *Avate* of which the *Indians* make an intoxicating Drink called *Caou-in*; but alſo other *Narcoticks* may do it, eſpecially if they be uſed mixt with things very hot, both Vertues then acting, as was ſaid even now of Wine as if *Henbane ſeed* be boiled in *Beer* as ſome are wont to do, it foxeth ſooner and vehemently; if *the Bark of Mandrake* be boiled in Wine till it look red; if *Opium* be drank with the ſtrongeſt *wine*; as *Bellonius* relates *Turks* do drink without any harm *Opium half a dram* with *Wine* when they go forth to battel, that being more bold and furious they may leſs fear danger: as alſo *Dioſcorides* writes that *Hemlock* taken with *Wine* doth work more effectual and kill the ſooner; yet all which as we have ſaid formerly of *wine* do more or leſs make mad, according to the variety of Temperaments: as alſo I have obſerved, that a weakneſs of the Brain may be the cauſe that they are ſooner affected, in him who by reaſon of a fall had a peice of his Skull taken out, and therefore was quickly drunk.

Some things applied to the Head can do the ſame as *Rondeletius* witneſſeth bringing an Example of him, who whenas he had applied *Henbane leaves* to his Head to procure ſleep, became *mad*.

By Inſpiration alſo drawing in *the fume of Henbane of Peru*, which they cal *Petum or Tobacco*, ſucking it through their mouth and Noſe, or as *the Engliſh* call it drinking it who for the voiding of Flegm, and alſo to induce Mirth do highly eſteem the accuſtomary uſe of it, that men are made like to Drunkards, and looſe all Appetite of eating and drinking and ſo can ſuffer Hunger a long time, thoſe that have writ of it, and tried the ſame, do witneſs. The which alſo happens as *Matthiolus* ſhews if the *root of the greater Nightſhade*, which they cal *deadly* be infuſed in *wine*, & the Infuſion given that hunger & thirſt do ceaſe; til by taking of *Vinegar* that fault is corrected but Sleep coming doth cure them both, as alſo in others.

A poyſonous Quality the cauſe of Madneſs.

A poyſonous Quality entring the Body from without, or *proceeding from things taken in* (for concerning that which is raiſed intrinſecally in the humors, ſhall be ſpoke off in a Melancholly humor) from ſome poyſons which hurt rather by Alienating the Minde then any other way, as the effects and hurts of Poyſons are Various, may alſo diſturbe the Mind; of which ſort *Dioſcorides* propoſeth many things which can do it rather by a poyſenous then narcotick quality and we purpoſely omit them when as they are rare with us: amongſt which alſo *Pliny* thought, that menſtruous blood devoured, was able to make Mad both Men and Dogs.

As alſo we oftentimes find by experience that from *biting of Creatures turned Mad, the Poyſon entring mans Body by the Spittle*, the like *Madneſs* doth befal them, eſpecially from *Dogs*, which do eaſier become Mad then other Creatures, to wit, about the heat of the Dog daies, ſo called for this Reaſon; or alſo about the greateſt cold as *Dioſcorides* will have it; and they are known by this, that they loath meat, ſend forth a foam, hang down their tail, and fly upon thoſe alſo which before they loved, and bite them: whoſe biting though at firſt it bring no greater diſcommodity then the wound and pain, yet if it be neglected, ſomtimes the firſt fortieth day, ſomtimes ſooner, ſomtimes after ſix months or a year, it induceth that *Hydrophobite* and *Madneſs* wonderfully changing the Mind of a man, as was ſaid formerly, and converting it into doggiſh manners. In which there is ſo great vertue of Poyſon, that ſome amongſt whom *Avicen* is one, have dared to teſtifie for truth, that ſome have piſt forth Whelps or ſome fleſh like to them: and *Dioſcorides* proves by the Teſtimony of one that this evil hath layen hid for ſeven years, and then firſt of all broke forth; and *Matthiolus* writes that the touching of certain woods eſpecially the Dog-tree and the Bloody-rod, will occaſion that this Madneſs do ſooner appear: and *Dioſcorides* alſo hath delivered, that by the Converſation only with one infected, a certain man contracted the like affect; and *Galen* teacheth that the ſpittle of Mad Dogs, if it touch the naked parts of the Body, is able to make Men Mad, all one as if they were bitten.

Which things as they do more commonly happen from Mad Dogs becauſe they live with men in great plenty and more familiarly then other Creatures, ſo alſo they witneſs that they happen from Wolfes run Mad and I have twice obſerved a dreadful and deadly Madneſs proceeding thence, and doubtleſs as *Ariſtotle* hath write the ſame from the bitings of other Mad Creatures as of the Camel and Horſe, and *Avicen* of the Mule ſo alſo the ſame may happen from the bitings of a Fox, a Weaſil, a Poulecat, a Ferret whoſe bitings at other times have ſomwhat of Poyſon in them, Nay of an Ape alſo, and even of a Man himſelf now ſick of this Madneſs whoſe ſpittle hath put on the Nature of Poyſon.

As it is very likely alſo that Madneſs may be raiſed from the Blood of ſome Poyſenous Beaſts as other accidents from other Poyſons, of which ſeeing we are deſtitute in our Countries, and therefore no danger hangs over us from them, tis needleſs here to ſpeak more.

The Agitation of Spirits the cauſe of commotion of Mind.

The too great *Agitation* or *Confuſion of the Spirit of the Brain*, inducing not only a light or ſhort affection which preſently ceaſeth, but ſomtimes an imprinted and permanent affect, is the cauſe of *a commotion of the Mind* if thoſe eſpecially which are diſpoſed to it, or who by reaſon of their cowardize, or weakneſs of reaſon, cannot reſiſt affects; but that is done by that *Commotion* which is done ſuddainly with a certain violence as by Joy, Anger, Fear,

or

or by that which is wont to happen *vehement and of long continuance as in Grief*, or that which happens *long continued and depraved in counterfeit Folly*.

Great joy for some thing obtained, especially if it happen unexpectedly, and that to the weaker sort as old Men and Women it begets that foolish species *of perturbation of the Mind with foolish joy* as was said, the spirits being so poured forth with the Blood, that the Face is not only over spread with red, but tears drop forth of their Eyes and all their Members being heated are unquiet.

Anger for some offence raiseth that *furious species of commotion of the Mind* the spirits and blood being vehemently inflamed, and cast forth with desire of revenge, yet by and by returning again by reason of grief of mind, whence they look so red at first, by and by wax pale and yellow: the which happens more easily to hotter and cholerick Natures, and to those who are first heated with Wine, and made sottish, hence then many Causes concurring together, they are as it were mad.

A Fright or *grievous Fear* especially happning of a suddain doth not only astonish the Mind, but if it be so imprinted in the mind, and move, change and confound the whole Body and Spirits, especially in those disposed, that it can either never, or very difficultly be got out of it, it oftentimes induceth a true Melancholy and that most grievous and worst almost then that which happens from an internal Cause, as shall be said by and by, the impression being so made upon the Spirits and Humors, and the Brain it self, that it can hardly be drawn forth, unless the whole Mass of Blood be exhausted, as shall be explained; and this is that species *of Melancholy* in which as it hath been shewed, they are vext with horrid and wicked Temptations, the which species I have often met withal, possessing both Women and Men, not sparing even the younger sort.

But this proceeds either from some *horrid Vision* appearing either *by Dreams* or *in deed* as of some *Ghost*, or *the Carkass of a Man hanged*, as in that *Maid* who beholding one hanging upon a Cross without the citty, fell into such a *Melancholy* which ending in *Convulsions* caused her Death; and *a Woman* who passing by a Gibbet late, and fearing least being shut out of the, City she should be forced to lie there all Night fell into *a long continued Melancholy*; *another* also who by chance beholding the Carkass of a Theefe, who hanged himself in the Prison, whiles he was put into a Barrel to be cast into the River, being astonish't in Mind, miserably remaining many years *Melancholick* could scarce any more come to her self: the which also oftentimes proceed from the Imagination only and fear of some Danger of Theeves when they converse alone in Woods, or at night in the dark, in which all things become more dreadful; or they proceed from fear of eternal Judgement for some grievous sin committed, as that *Concubine* of the Priests pretended in her *grievous Melancholy*, because she had brought forth so many Children from an unlawful Bed; which imagination and perswasion conceived from that, even those that do now suffer this affect do retain, and do express by words and very deed such like things which gave them the occasion, as was said in the accidents of *Melancholy*.

Sadness or *vehement Grief* lasting long doth also beget *a Melancholick Perturbation of the Mind*, which also may degenerate into the true one if it take deeper roote and disturb the Spirits, and change the Temperament of the Body: or it induceth a certain Phansie sometimes foolish, sometimes maddish, and sometimes desperation as we have described in explaining the kinds.

But this *Sadness of Mind* proceeds from grief or mourning most commonly for some things lost of Money, Honour, or any other thing, as the Death of Children, Parents, Friends, with which the Mind oftentimes is wonderfully tormented and afflicted for a long time; or from Shame and Bashfulness, with which generous minds especially are so troubled for some error committed, that it is plain some have thereby been driven to despair; as they write it happened to *Homer*, because he could not resolve the Fisher-men their Riddle. *Envy* also doth so afflict a man, and as they are wont to say gnaw the Heart, that these also become wholly *Melancholick* and by their Face and Gestures express envy all manner of waies, as *Ovid* sets it forth. Also divers affects of the Mind proceeds chiefly from *the too great Appetite* or *Concupiscence of some thing honest* or *dishonest* which they perswade themselves will be profitable or honest; as seeing by the immoderate study or Science men oftentimes being too intent, do procure to themselves a certain Phansie, and those whom ambition and vain glory torments, and who are taken with the love of themselves (Philauty) boastingly, they talk and do many foolish and ridiculous things, which *the Comedians* have elegantly shown in the vain glorious Souldier under the persons of *Thraso* and *Pyr*, *Gopolymices* in their *Comedies*, or when the desire of revenge not ceasing after anger, being carried into a permanent Hatred, and Enmity, which can scarce any more be blotted out, continually thirsting Revenge, and intent on that, they do nothing rightly, but most things unhappily, being troubled in Mind; or *carried on the Covetousness, the love of Riches*; they are so madded, that they run headlong into many Vices, Sins and enormous Deeds; whether also that *Dotage of the Alchymists* ought to be referred who seeking *the Philosophers stone* with so great heat, all though they see they loose their Labour and Cost, and can do nothing, nor know nothing done by others yet they bate not of their unwearied Labour, and led on by continual Hope, no waies ceasing from their Labour, they waste their whole substance; last of all and chiefly that *vehement Heat and Concupiscence proceeding from love* in both sexes, when they cannot alwaies enjoy it, or not all, 'tis a Cause of that *Grief* (for every Lover mourns) with which being overcome at last, they are vext and tormented with so many different Passions of the mind, that despairing they think attempt and perform, things ridiculous or weighty and dangerous, as was said in the accidents to which love, sometimes and elegant beauty, sometimes lovely conditions, every one according to his Phansie, for the most part with a blind judgment; sometimes a certain Sympathy and confirmity of manners, gave the beginning, occasion, and fomented it.

Counterfeit Folly and *long continued*, constantly exagitateing the spirits depravedly doth cause that by this custom changing Nature, some *Fools* who for their gullet Belly and profit sake, exercise their Folly before great Men, who delight in the Conversation of Fools, seeing they have fitted and accustomed themselves to this from their Youth, they acquire that Habit in it, which afterwards seeing it can no waies be blotted out, they continue *Fools indeed*.

A perturbation of the Spirits the cause of Melancholy and Madness,

A perturbation of the Spirits of the Brain not that which raised from the Affections of the Mind doth too much exagitate and confound them, or affects them with an occult quality of which we have spoken already, but *that which being raised intrinsecally from some matter mixt with the Spirits* doth cloud obscure, darken the animal Spirits which ought to be bright clear lucid and most pure; may induce the said

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Melancholly and *Madneſs* alſo, if it Act more vehemently:

Which matter they cal Melancholick becauſe they think it is black, and they contend that it doth alter the Mind not only by troubling the Spirits, but alſo by cooling the Brain; ſeeing they hold this humor is cold and dry, but ſeeing we have ſhewed in *Sleepineſs* and *Supidity* that from the coldneſs of the Brain, whether joyned with moiſture or drineſs its Functions would rather be impaired or aboliſht, then intended; this *Melancholick matter* which we alſo call *Turbulent impure and filthy* doth not by cooling, but becauſe tis mixt with the ſpirits diſturbs them, and the Brain in whoſe ſubſtance the Spirits are every where connate, we have proved in *Anatomy*; and by a certain Malignity which it hath alſo attained it doth at laſt imprint that hurt from which follow ſuch enormous, accidents, the which notwithſtanding cannot therefore ſuddainly bring Death, becauſe it is an evil of long continuance. The which matter is either a Melancholick vapor or humor.

A Vapor the Cauſe of the perterbation of Spirits in Hypochondriacal Melancholy.

A Melancholick filthy Vapor troubling the Spirits and affecting the Head breeds that Species of *Melancholy* which they call *Hypochondriacal*, becauſe they chiefly complain of that place affected; for the cauſe of this evil lurkes in the parts of the Belly under the Ribes or Hypochondries, which the *Arabians* call *Mirach* and from thence denominate this Species *miraohal melancholly*, and from that part a vapor raiſed upwards to the Head at a certain time, then when it aſſails it, it makes this melancholly exert it ſelf. Moſt men write that the fewel of this is the *Spleen* becauſe it is the natural ſeat of *melancholly* and becauſe they are moſt troubled in the left ſide, but others affirm that this matter is contained in the *ſtomach* alſo which doth moſt poſſeſs the left hypochondria, and in its neighboring part: others alſo place in *the Liver* and *Meſentary* and the *Veins* of that called *meſaraicks*: which we alſo affirm is heaped and lies hid in the *meſarick Veins* not only thoſe that through the meſentery and call, but alſo the other natural bowels, eſpecially in thoſe places where theſe branches of the *Vena porta* being more and greater do tend towards the Spleen and Stomach in the left ſide, although this matter may be heaped up alſo in other places, upon which account they feel their pain moſt commonly in the left ſide, yet ſomtimes in the right part of the hypochondries and back, where the Spleen and chief bowels lie hid.

But moſt do give out that the *matter* lying there, from which this evaporation riſing doth affect the mind, to be *melancholly blood*, which we alſo can no waies deny, but we deny it to be cold, ſeeing that burning which the Patient feels in that place where the humor lurks doth ſufficiently declare the acrimony and heat of the humor: for as it was ſaid in *Feavers* that the *blood* in the *Vena cava* did cauſe *continual Feavers*, but that in the branches of the *Vena porta*, being more cholerick and excrementitious which is continually heaped up from the meat and drink lately changed into chyle, when it putrifies it doth by its evaporation cauſe *intermitting Feavers*; ſo alſo it happens in this caſe, as we ſhall by and by ſhew, that as from *melancholly blood* contained in the branches of the *Vena cava* the *true melancholly* is cauſed, ſo from that which is accumulated in the branches of the *Vena porta* and there fils up the Veins in certain places, yet doth not putrefie, but is aduſt, fæculent, and hath alſo ſome malignity; if the vapors of that raiſed up, keeping the condition of the humor from whence they proceed, do aſſail the brain they wil cauſe *a melancholly returning by courſe* which laſts ſo long, til they being diſcuſt again do grant ſome eaſe to the Patient, ſo long til new vapors ariſe, which for the moſt part is every day.

And hence it comes to paſs that this *melancholly* otherwiſe than the true, hath its *intermiſſions*, then eſpecially when ſome *excretion* of *wind* chiefly, with which this evaporation doth fil the Stomach and Guts, is made by *belching*; which carries with it a heat by reaſon of the humor from whence it proceeds, and an acidity by reaſon of the Stomach, in which that a certain acidity is alwaies contained we ſhal declare in its proper place, or when theſe vapors which tend upwards are partly emptied by *vomiting* or partly reveld by *Farts* and *Stools*, or when by *cold meats* yet moderately taken, thoſe heats being mitigated and vapors repreſt they do a little eaſe the evil, as by taking that which is hot and plentiful, that affect by reaſon of the boyling of thoſe parts and plenty of wind, is exaſperated: becauſe the ſtomach is compreſt with theſe and pained puft up, and together with the Guts makes a murmuring, rumbling and waving the aforeſaid *windes* are ſo frequent in this affect, that it is called alſo *the windy melancholly* and divers Excrements thruſt thither from *the meſaraick Veins* are the Cauſes, by reaſon of which alſo they then feel heats in thoſe places where this matter principally lurks, as hath been ſaid: but alſo theſe *filthy vapors aſcending* upwards, becauſe the heart alſo by the way is oftentimes grieviouſly affected they complain of *a palpitation of the heart, and beating of the Arteries* and the *Midriff* being ſomwhat *hindred* of ſome *ſuffocation*: ſo that ſcarce any other evil doth ſo long torment a man as this affect doth, if he lie not down by the Diſeaſe, with ſo many *accidents* in *the hurts of the natural, vital, animal parts* infinite of which they continually complain.

But *the cauſe* and *original* of this *melancholly blood* collected in the meſaraick veins proceeds from *an ill courſe of Diet* long continued, begetting the melancholly juyce, or thick cholerick, whence by degrees a great filth of it is heaped up at length: as in *intermitting Fevers* for the like reaſon we ſaid that cholerick blood was produced; which may come to paſs from all meats of evil juyce, hard concoction, being corrupted, and from thoſe that are hot, rather than from the cold and dry (unleſs in as much as theſe being hardly diſgeſted do corrupt alſo) in which we offend chiefly for gluttony and pleaſures ſake, whenas they are ſweet, ſalt Fat, Acrid: although moſt men believe *the fleſh* which is taken from *wild Beaſts* and from *ſolitary* or *melancholly creatures*, as that of *Hares, Veniſon*, to be more apt to produce *a melancholly juyce*, as amongſt *Plants, Colewarts*, and *Lentils*; and it gives a great and principal occaſion of this evil, if the excretions went to be made at ſome certaintimes, by which nature was wont to evacuate theſe things at firſt collected in the ſtomach or guts, as *looſneſſes of the belly* or *Vomiting* be no more; or if this filth being collected in the meſaraick Veins, *the Hemorrhoids* be ſuppreſt, eſpecially if they did once flow, which ſomtimes is the chief original of this evil.

A melancholly humor is the cauſe of the perturbation of the ſpirits in melancholly and Madneſs.

The humor producing *true melancholly* and oftentimes *madneſs* is called *a melancholick blood* ſuch as they think to be either black choler it ſelf, or that which is fæculent, but we have already ſaid formerly that this *matter* doth no waies want ſome *malignity* and we may by right alſo call it *poyſonous* ſeeing it cannot

not otherwise be rightly explained, as *Galen* shews *l. 6. de loc. affect.* that a poysonous matter is generated from seed and blood corrupted; the which its enormous accidents do sufficiently declare, which show themselves in them as if they were struck with poyson especially madness; when notwithstanding there is no other hurt, no manifest disease nor danger of death, and seeing they suffer these things for many years, oftentimes without any other damage; which certainly can no waies be caused from a cold humor, such as they think the dregs of blood to be, nor from black choler which if it be confounded with the blood is wont to bring *the black jaundies* and other grievous diseases of the Skin; therefore we should rather recur to *a malignant poysonous and occult quality* such as we shal often declare is found in many the like pertinacious and horrid diseases, which they thought did spring from black Choler, as hath been said, and in which by reason of their malignity *Mathiolus* asserted *the Cacodæmons* had their residence; then teach and allow of those things for true, which are thus believed out of a certain custom and thought it to be seen in that blood let which is black, when notwithstanding congealed blood of its own nature even in the sound is wont to look blackish, and bein kept long, to appear black like pitch and we wil embrace truth rather than Opinions, or we will openly confess that we are not able rightly to explain the true cause.

But the blood now mentioned is contained in the branches of the *Vena Cava* as that which caused *a hypochondriacal melancholly* is in the branches of the *Vena porta* and therefore it raiseth *a melancholly* or *madness persevering* not invading by courses as the *hypochondriacal* doth, unless as it hath its exacerbations and remissions, as we said also it came to pass *in continual Fevers* for the same cause; as hath been explained that by reason of the difference of these Veins, in which the matter of *Fevers* is contained, for the same reason they become *continual* or *intermitting*.

But it is certain that the matter is contained somtimes in the veins of the head only, & other times in the veins of the whol body, especially in the greater, and upon that account doth cause more grievous or more mild accidents; for as it was declared in *continual Fevers* if *the matter* putrifie *about the heart* there is caused *a most burning Fever* called a *Causus*, so it fals out here, to wit, that if such *matter* be contained in *the ventricles of the brain*, where otherwise the blood of the Veins and Arteries confounded together is very hot, *a madness* or *grievous melancholly* is raised or if *about a more noble part* as *the Womb the Blood* which is wont to abound there and *the seed* also being retained be corrupted and changed into *that poysonous matter* as was alleadged formerly by the testimony of *Galen*; it causeth that *madness of the Womb* in which they so much desire enormous and brutish copulation, as hath been demonstrated by the example of a *Woman* who by reason of a long continued sickness of her Husband, by reteining her seed fell into this disease, and covered copulation with dogs: and by how much *the further seituation* it hath *from a principal part* in the lower parts, by so much *the more mild melancholly ariseth*.

All which things must be judged how they are, by the nature of the accidents, and from this that no *other external causes* went before, as was said of *a fright* from which *a grievous melancholly* is commonly caused; rather then by the constitution, which they set forth to be *melancholly from the hairs of the body, the color of the Skin, and the habit* also from the *excrements*, seeing these diseases may happen not only to people *swarthy, lean, and sad by nature*, but *to all Natures, all Ages*, as I have often observed.

But that *the cause* of it may depend upon *a melancholly constitution*, which they have contracted to themselves by *nature* or by an *ill course of living*, as was shewed *in the hypochondriacal*, we do no waies deny, seeing *melancholly blood being turbid and impure* doth the easier acquire *malignity*; as also we have somtimes found that *hypochondriacal melancholly* hath passed into the true one, the blood in the Veins being at last infected by the long continued evaporation of heat: and also that *melancholly* which proceeds from *the affection of the mind* if it fall upon a fit constitution, called *the melancholick* it wil have *a double cause* concurring to excite *a true melancholly*; lastly *from the suppression* of such *excrements* which easily pass into this poysonous matter, as from *the retention* especially of *the menstruous blood* or *seed*, as somtimes *a Suffocation of the Womb* doth proceed, so at other times *a madness of the Womb* as hath been explained.

A hot distemper affecting the brain and its membranes, for the most part cause that first *a pain of the Head* and if it be more intense, *a dotage*, by too much exagitating the functions of the mind; but it grows hot somtimes from *a hot vapor* which is raised up either from *hot meat and drink* but unless then there be joyned *a Narcotick* or *madding faculty* as was said of Wine, heat alone wil scarce bring *a deliration* but only *a pain of the head*: but this is sooner done from *hot humors*, blood too much evaporating, especially if it contract some *malignity* also which is wont presently to make the brain mad, as hath been shewed in the causes *of melancholly*, which easily happens *in blood altered or putrified* whether *in the Veins* or *out of them* that by corruption it acquires some *malignity*, from that therefore the like *vapor* being carried up to the brain it breeds *a bastard phrensie* so called, in many diseases generated from such like humors, whose symptom it is.

A hot distemper the cause of dotage, a hot vapor the cause a hot distemper and dotage in a bastard phrensie.

So somtimes *a dotage* is wont to follow, *a hot expiration raised from blood* in diseases generated from inflamed blood, as in *diary Feavers, a sinochis and internal inflammations*, which is known to proceed from thence by the disease accompanying it: also from *humors putrifying* and so getting a preternatural heat *a dotage* doth somtimes invade all *putrid Feavers* at what time chiefly the hot expiration doth very much assail the head, as in intermitting Feavers oftentimes at the beginning, otherwise about the State, and then also chiefly in continual Feavers; the heat of the brain helping, which by reason of *the Fever* together with all the parts of the body is heated also; for the same reason also Children do oftentimes Rave, by reason of *Worms* when they putrifie *a Fever* for the most part coming upon it. *Choler poured forth into the Stomach* sending also a hot evaporation to the brain, because it is acrid and subtile, doth rather cause *a pain* and *a Vertigo* than a *dotage* as shall be said in its place.

Also *Blood* made *too hot* and especially *too thin* contained in the ventricles and Vessels of the Brain, inflaming the brain not only by a vapor but also by its proper substance induceth *a bastard Phrensie*; as it somtimes comes to pass, when by a blow, or Fall, or in Feavers it flows thither.

An hot Humor is the Cause of a hot Distemper and Dotage in a bastard Phrensie.

An Inflammation is the cause of a hot distemper or Dotage in a Phrensie,

But if that it be carried out of the Vessels and poured upon the brain and its membranes, it breeds an *Inflammation* or *Erysipelas* according as the Blood is, then it causeth *a true Phrensie* which also is called *a Syriasis* especially if it befal Children whose external and violent Cause may be that which shatters or hurts the Head, or the *internal, a Fulness of Blood* and *inflammation* of it whence *a synochus Feaver* arising, pouring forth a portion of its hotter blood into this principal part, which before did very much aboundwith blood it makes this grievous Disease, whose Companion is *a continual Feaver* as hath been declared *in Feavers*: differing therefore from *a bastard Phrensie*, because *the feaver* in that goes before *the Dotage* but in *a Phrensie* they both invade together; by which signe also tis chiefly known.

An evil Conformation of the Brain, as if it be too big, or little, or otherwise be not rightly formed for the most part creates the said Foolishness bred in some from their Birth, whenas this proceeds from implanted Causes, as from the seed of the Parents, who either were Fools themselves, or their seed had contracted some fault; and tis easily known by this that they were Fools from their Birth, because the Head answers the *unshapen Brain in Greatness or Smalness or Deformity*; which fault if it reach *to the Nerves* also and other parts tis no wonder that these are sometimes born as we have described, either *deaf* or *dum* or *crooked*, or or *otherwise faulty*; the which certainly is the chief Cause *of Original Folly*, as sometimes this apparent Deformity of theirs doth shew, sometimes tis not discovered but by opening after Death.

An evil Conformation, the Cause of Folly.

Distemper the cause of Foolishness.

So also we do not deny that this may happen from an *evil Distemper of the Brain*, the which notwithstanding seeing it cannot be rightly explained, nor corrected, is no further to be enquired into.

A speck in the brain the cause of Madness.

It hath been sometimes found out, that a certain *black speck* in *the brain* or *membranes* discovered by Dissection, hath been the Cause of *Madness*, as sometimes also *Putrefaction* bred in some part of the Membranes of the brain, from which tis likely that *filthy Vapors* being continually raised did trouble the Spirits, which some also have delivered may happen from *Worms* generated in the Brain; which hidden faults seeing they are first manifested after Death by opening the Skull, we can hardly conjecture what they are while the Man lives, unless in General, from this, because other signs are wanting here which should demonstrate other Causes.

Putrefaction in the Brain the Cause of Madness.

Worms in the Brain the Cause of Madness.

The Cure.

In the Cure *the Causes* must be distinguisht, and *the Remedies* fitted to them; which we said were either *a malignant Spirit*, or *a drunken* or *poysonous Quality*; *an agitation* or *perturbation of the Spirits, a hot Distemper and some faults of the Brain.*

The Cure of those possest with the Divel.

The preternatural Cause proceeding from *the Divel* as it doth no waies belong to the Physitian, so neither the Cure; for *the Divel* is forcibly expel'd by the Prayers of Divines and godly people in the Name of Jesus; as Christ cast forth *Divels* and gave his Disciples that Power; but also *the Divel* sometimes feining himself of his own accord to be put to flight by certain Words and Ceremonies of men, doth delude Mortals.

The Cure of Drunkenness from a temulent quality.

If Drunkenness arise from *Wine and other inebriating things* as hath been said, after some hours the Vapors being discust, especially by the intervention of sleep, they come to themselves of their own accord; and if Vomiting follow it, it is good, upon which account *Avicen* thought it good to be drunk once a month.

But if they continue this Course of life, the Nerves being weakned by reason of their frequent stupidity, which is discovered by this even then to come to pass, if presently after that they have not yet drank immoderately, they begin to stutter and stumble; they become Tremulous, Paralytical, Gouty, Hydropical, as shall be said in those places.

Therefore that they may have a Care of themselves they are to be admonisht *from Drunkenness* and to be frighted by declaring the Danger of it; and if they cannot refrain some have delivered that this may be effected, that they shall wholly loath Wine, by strangling an Eele in Wine, or a Frog or the barbel Fish, or the Rotchet Fish being putrefied in it, or the Sea Grape, and that Wine afterwards being drunk off.

But if sometimes a Necessity of drinking and contending in Cups do urge, as this is brought into use as a Civil thing at Banquets to the great hurt of mankind, for prevention it hath been observed that these things following being taken before do prevent Drunkenness or at least wise make it more gentle.

Five or six *bitter Almonds* eaten before meat.

Wormwood also, whose *Wine* notwithstanding the Swillers do use rather the day after a Fox, that they may correct their Stomach offended with Choller, (whenas to contemperate that they fil themselves with drink again) from whence these *Verses.*

If thou be hurt by drinking over night
Rise early to't this Medicine is full right.

Rue because it makes *the Cup safe*, as *the Verse* sounds, is commended for this use, which I think is rather said so, because it preserves from Poyson.

Coleworts taken at meat hinder *Drunkenness*, and so doth *its Seed.*

If one drink *Milk* fasting, he shall be safe that day.

Pliny teacheth that *the Lungs of Creatures roasted* eaten and do keep of *Drunkenness* other expres by Name *the Lungs of Sheep.*

One writes that *the pouder of Swallows burnt* being taken, will not suffer one to be drunk to Æternity.

A pouder hindring Drunkenness may be made thus, of which give one spoonful with *Austere Wine.* Take *of the seeds of Coleworts one dram, Coriander half a dram, Camphire two grains*: make *a pouder.*

A more *Compounded one* may be made thus, of which give one spoonful or two drams with *Wine of Pomegranates*, or with some *other acid, stiptick*, or with *cold Water*, or with *Sugar* let it be reduced into the form of *Lozenges*, Take *of the seeds of coleworts one dram, of Plantane, Purslane, Bar-berries each half a dram, Coriander prepared two drams, flowers of red roses, water-lillies, red Sanders each half a dram, Mastich, Amber each one scruple, burnt Ivory one scruple, salt half a scruple, Camphire six grains*: make *a pouder.*

This may be used in the form of an *Electuary*, and given before drinking. Take *of conserve of Roses, the Rob of Currance and Barberries each half an ounce, bitter Almonds branched and bruised twelve seeds, of Coleworts one dram,*

dram, red Roses one dram, Syrup of Sloes as much as is sufficient make *an Electuary*.

An elegant *Syrup* of which *one ounce* ought to be taken before they drink Wine, Take *of the juyce of white Coleworts, four Pomegranates, Currance each two ounces, Vinegar one ounce*; boil them together for your use.

They are less foxed who drink latest not till their stomach is well filled with Victuals; but they quickly who hasten to drink Wine fasting, or presently at the beginning of a Meal.

Outwardly *Ivy* applied to *the Head like a Garland* or the Juyce of it moved to the Head keeps off Drunkenness.

Also the wearing of an *Amethyst stone* is beleeved can do the like.

But to cure those that are already drunk, that the wine may do them the less hurt, Vomiting doth very much help; or if you give them acid things presently at the end of the Meal, or the sooner the better, and let them be taken plentifully, because as it was said in *Narcoticks* they weaken the efficacy of the Wine, of which sort are these following.

Frumenty of Milk and Barley flower with Vinegar also *sour Milk* as it is wont to concrete.

Sour Apples eaten, also *acid Peaches and their juyce* as also *Quinces*.

The Heads of Coleworts condite, and *Rapes* till they grow acid, as our Country men are wont to prepare them, do very much help.

Vinegar drank *diluted with water*, or taken by it self in a good quantity, is *an Antidote against Drunkenness*, with which a certain eminent Foxer, for a long time being dayly drunk, was wont to guard himself, that he might take no hurt by it.

Besides these, *Lettice, Mint, Wormwood, Myrtle-berries* being eaten, or *the Juyces* of them taken do keep off Drunkenness.

The distilled water of Saffron flowers being drunk doth the same.

The smell of *Camphyre* and *Saunders* likewise do good,

Also *Oxyrrhodines* applied to the Head.

And if *the Cods* be moistned with *Vinegar* or *cold water*.

All which doubtless will do good not only in that *tumulency* which is contracted by Wine, but also in that which proceeds from the like inebriating things, as hath been said, as also we have said that *Narcoticks* for the same reason are corrected by acid things; and for the taking of *mad Nightshade* we have shewed that *Vinegar* is a Remedy,

But what things besides these mentioned, do by a certain propriety resist some as wel *Narcoticks* as others, shall be explained in their place.

The Cure of Hydrophoby from the biting of a mad dog.

Melancholly or *Madness* arising from Poyson either taken in, or *by a bite* or *blow* entring the Body, that *Madness* only which is caused by *the biting of a mad Dog* is here propounded, whenas the other species are rarely existent because the Cause is rare, neither is there any other cure applied to them, then what is due also to other Poyson.

In *the biting* therefore of *a mad Dog* or *Wolf* (for they differ not in the Cure) although it be a very dangerous affect, yet Remedies being suddainly applied very many are healed; but after the evil hath so far gathered strength, that they now are afraid of the Water, they are very hardly restored, as *Dioscorides* mentions and most of them die; in which notwithstanding some hopes of recovery is conceived by this signe, if looking upon a looking Glass or the Water, in which the image of a Dog is represented to them, as hath been said, they take notice that it is an error, and that they are deceived, or that not appearing they acknowledg their own figure offering it self.

Presently therefore *the wound made by a bite must be dilated* and *the Lips of the wound must be scarified* that the Blood may flow very well, and with *Cupping glasses* applied with *much fire* or with *Leeches* if they be at hand, the strength of the Poyson must be drawn forth, because though the wound be great and large, which by reason of the plenty of blood flowing forth, with which part of the virulent spittle is exhausted, is better then if it were small and narrow, nevertheless it must be done, and *the flesh torn and cut round about with a Pen-knife must be cut off*.

Burning also made with *an actual Cautery* seeing the fire doth tame Poyson and suffer it not to go further, is a most ready Remedy: and we must have a Care that the escar falling off, the wound be not cicatrized, before the fortieth day or till after that time, and that either by *a septick* or *corroding Medicine* such as is *precipitate* the which also we may use at first if he will not endure *burning* instead of that, or else *burning* must be repeated; and we must take Care that the wound be rather sordid and ill disposed, then clean, and that it be not closed up, by applying those things, which besides that they do attract Poyson, may also suppurate the flesh.

Which may be done, if *grains of Wheat chewed* or *baked* be applied to *the wound*, because they suppurate and dilate the wound, and when they are chewed by reason of the spittle they help also by a propriety.

An Onion, wild Garlick and Rue bruised together, and made up with *Honey* and *Salt* do egregiously attract Poyson, and the more if *Treacle* also be mixt with them to which *Dioscorides* adds the *Cyrenaick juyce*.

If *a fourth part of Opopanax* and *a sixth of Vinegar* be added to *Brutian pitch*, or instead of it you may take *the common*, it will make *an attractive Plaister* most effectual for these things as *Galen* teacheth.

The salted flesh of the Fish Smaris and *Omotarichus* applied and other *salt things* do good; also *the sauce of all salt Fish* applied for Fomentation.

Sour Docks, pounded, stinking Horehound, Fennel Roots, Rue, Angelica Roots, Lafer, Herculean Panax, bruised with *Honey* and *Salt* do the same.

Such *Remedies* also must be given presently to drink as may by a propriety overcome the force of this poyson, such as are made *of the true River Crab* called *Cancinus*, which *Diascorides* and *Galen* have much approved; instead of which *Rondeletius* takes *the sea Crab*, and that found in the standing Pool by the Sea of *Mousspessulus*; and we perhaps may take with equal success our *River Crab* since that also resists poysons.

But these *Antidotes* must be prepared after this manner, Take *of the ashes of the true River Crab* burnt in the *prunings of the white Vine* and poudered *two parts*, *the roots of Gentian* most finely poudered, *one part*, mix them, give two spoonefuls with *clear wine* for four daies after which give the trebble weight, *Dioscorides* doth witness that this one thing hath benefited many, and *Damocrates* before *Dioscorides* described this *Antidote* in Verse, and *Galen* so commends it, that he testifies no man died that used it.

Galen also prepares and gives *the pouder of the simple ashes the Crabs being burnt alive in a copper Dish*.

Or he gives it *Compounded* thus, which he relates he had from his Master *Æschion the Emperick*, and he highly commends it, Take *of the ashes of river Crabs burnt ten parts, the Roots of Gentian five parts, Frankincense one part*, instead of which the Ancients added *Rosin of the Turpentine*

tine tree, make *a ponder*, give every day the measure of a great spoonful sprinkled *in water* for forty daies, or if the Physitian come late let him give two spoonfuls at a time.

There are who prepare this *Medicine* thus. Take *of the ashes of Crabs parts two, Gentian roots part one and an half, Myrrh part one*, make *a ponder*.

Besides these *Antidotes Dioscorides* and *Galen* do magnifie *the Liver of a mad Dog roasted* and given.

Also *the blood and urine of a Dog*, as also the *Runnet of a Hare, Fox*, or *Goat*.

Galen's Dry Alysson given forty daies together in *Hydromel*, he testifies is *Archigenes* Effectual Remedy.

Aetius teacheth that *Iudiack Bitumen one dram*, drank with *Water* doth cure this affect.

The roots of Swallow-wort drank *one dram and an half* weight, with *the Water of Blessed Thistle* for forty daies, is *Mathiolus* Remedy. *Star-vervain* also is good, and *the bark of Wild fig tree*, drank with *water*, also *the root of Vipers grass* or *the juyce of it*, as also *the root of Angelico* with *Niter*.

Also *Honey of Roses* drank saith *Dioscorides*,

Mithridate and Treacle, as they are adverse to all poysons, so to this also.

But those things which profit both *taken and applied*, are as follow.

The *Sea-horse* wrought with *Honey* and *Vinegar*.

Balm, Mugwort, Wormwood, Centory, round Birthwort, Germander, Pennyroyal, the root of roundish leav'd Dock, shard Dock and Bryony.

For matter of Diet, 'tis good if they eat *Garlick, Leeks Onions*, also *the true River Crabs*, season their *meat with Spices*, drink *pure and sweet Wine*. *Avicen* commands to drink *Irond, or steeled water*, also Milk Curds which moves to stool, and tames poyson,

In the first place *drinking of water* which they so much fear, doth cure the *Hydrophobous*, wherefore they must be deceived by al means that they may drink it through a long pipe, or by some other sleight and not behold it, for which cause they advised to boyl *back Vetches* in it which also resist poyson, that so the water being made more darkish to him to behold it, it may represent no Image which may strike fear into them, and also that they may be made very thirsty *a young Dogs runnet* is given to drink with *Vinegar* for then *Aetius* writes that they are taken with a desire of *water*, and he highly commends it.

Avicen teacheth that *the provocation of urin*, so far and with such strong *medicines* that they pis blood too, doth very much help, who as it hath been said, thought that puppy Dogs or somwhat like them hath been voided by urine.

And for this cause commends the use of *Cantharides*, which may more rightly be given thus, Take *of Cantharides breaking off their tender wings one dram, Lentiles cleused half a dram, Spike, Cloves, Saffron, of each half a dram*; give *half a scruple* with *Wine* to them fasting for three or four daies til they void blood.

Sharp Dock if it be given to drink causeth a plentifull and turbulent pissing with which plant alone given, if also the wound be fomented with the *Decoction* of it and be anointed with the *juyce* of it, a certain man did perfectly cure *those bitten with a mad Dog*, as *Avicen* teaches.

Dioscorides teacheth that the provoking *of sweat* before and after meat doth good.

The same writes that *Evacuations by the Belly* do also bring great help, if it be caused by *Hiera of Coloquintida* or by *Hellebore* whose quality he thinks is so great that it will cure almost the desperate, the which also may be done by *other purgers* chiefly *destined to melancholick Humors*.

Dioscorides also useth *Dropacismes, Sinapismes over the whole Body* as some also do allow of *Cauteries* applied *to the hinder part of the Head* and *behind the Ears*.

Amongst *Amulets* a *Tooth* drawn from *the Dog that bit* and tied to *the Arm* also *Hares* pul'd from the same Dog and laid on *the wound* are thought to do much.

They write that in some places *the Priests* do cure this evil with *exorcismes* which seeing they are things preternatural, we leave them.

The Cure of commotion of Mind from agitation of the Spirits.

A perturbation or *commotion of the Mind conceived* from *a vehement* or *long continued affect of the Mind* sometimes ceason of its own accord, sometimes hardly gives way, oftentimes can never be corrected: for *profuse joy* easily vanisheth, *anger* also is a *short Madness* especially in those, who presently grow hot and look red but suddainly again abate, who then are wont almost to be sorry that they were angry; *Sadness from grief of Mind* ceaseth with time, seeing there is no grief as *Cicero* saith, which the length of time doth not either change or diminish, *envy* conceived is hardly blotted out; *ambition* in some, and *coveteousness* especially in the aged once imprinted in their Minds, can scarce be rooted out; all which notwithstanding do not so much make men mad as *Love* doth in which although there seem to be onely a light *Alienation of the mind* at first, yet if it take deeper Root, it doth so disturb it that sometimes it drives men to *true madness and dispair: a true* and *persevering melancholy* arising from *fright* is more pertinacious then al the rest, and hard to be cured, oftimes tormenting and consuming a man for many years and at length making them desperate; and also we cannot correct that *Folly contracted by custom*,

Yet *the Cure* must not be neglected, if the evil persevere, and there be hurt or Danger, which may be done;

First of all by *taking away the Cause* and *the occasions* from which these proceed, if they being still present do foment or increase the affect; as in *anger* by turning away that which offends, in *sadness* that which troubles, and so of the rest; but chiefly the principal *Remedy of Love* is to remove *the object and sting of it, speedily a far off and a long time* which the vulgar intimate by this Proverb, out of sight, out of mind; and what is wont to be said is good in *the Plague quickly, a far off, slowly*, here also is the principal Rule of Cure.

Oftentimes the affections of the mind are mitigated or driven away by *Counsel, Admonition, Perswasion*, by propounding according as the mind is affected that it is nothing or of no moment, then by explaining the Discomodities that follow from thence, sometimes the offence to God, and comforting them with the hopes of changing the present life for a future that is better and not far off: the which if they avail not, by severely threatning also Gods displeasure and the punishment of Hell, by reproving them, and chastising them also with stripes if they obey not, til those things which they love be loathsome to them, as *Gordonius* writes.

But principally in some *passions of the mind* it brings a great deal of help, to move *the affections of the Mind which are contrary to this affect* that troubles, and so to bring them into a contrary passion, seeing they do bring them to a mean, as contraries are wont to be cured by contraries, and so those things are taken away which otherwise would not give place: thus those lifted up with *too much joy*, if they hear *ill News*, do presently abate; and *those that are sad* are refreshed with *unex-*

pected

pected and vehement gladneſs; ſo *the angry* are mitigated if *they be frighted*, if *thoſe frighted* be ſtirred up to *anger* they are freed; thoſe that *hate vehemently* are reconciled being moved with *mercy*; and thoſe that are oppreſt with *grievous Love* if they can be driven to hate the perſon which they Love, they are moſt certainly freed, whether they may ſomtimes be brought, if they hear diſhoneſt and filthy things of her, which are either invented or true, but blind Lovers ſee them not, but eſpecially in generous minds, if they think themſelves deſpiſed by their Love and ſuffer a repulſe (for nothing foſters love equally as reciprocal love, and nothing is more deer than to be beloved again) preſently indignation follows which perſevering, unleſs it be extinguiſht by ſome falſe and extorted tear, breeds hatred: hither alſo is referd *the vehement intention of the mind upon ſome other things* which is wont to put out that *conceived before*, or at leaſt waies to diminſh it, whence *the Poet* ſaith, *Shun Idleneſs and* Cupids *darts are loſt*, and if the apprehenſion be divided into two or three affects though the ſame, it comes to paſs that being divided or diſperſed 'tis leſs ſtrong than if it were united; for *the ſenſe intent on many things is leſs able for each particular* whence *Ovid* reckon'd it amongſt *the Remedies of love* for one man to have two Miſtreſſes.

But what chiefly concerns the operation of the Phyſitian, *in ſudden and vehement paſſions of the mind*, he muſt diligently obſerve *the commotion of the ſpirits and humors, which in ſome affects* are moved from *the Center to the ſuperficies, in others on the contrary*, and muſt reduce them by *a contrary motion to the ſeat deſtined* for them; but *we call forth* thoſe which do as it were oppreſs *the heart* in *frights* and *ſadneſs* with *frictions and pleaſant exerciſes* and eſpecially with thoſe that are proper, & with *a bath*; and again thoſe which are poured forth with *Anger*, *Joy*, we repell again to the inward parts, not only by *a contrary affect of mind* as hath been ſaid, but alſo *by ſprinkling of cold water* and *bleeding*, the which notwithſtanding ought not to be done in the very *madneſs*, but a little after.

But *in perſevering paſſions of the mind* and *thoſe* that already *change the body* according to the conſtitution of the body, and redundancy of the humors viz. of a plenitude or Cacochymie, we wil order *the evacuations* and *alterations* both *for the cure* and *preſervation* if they be diſpoſed to theſe or thoſe affects; and if *a true Melancholly* or *maddeſs* do follow thence, as hath been ſaid doth chiefly happen from a fright, the cure muſt be perfected after the ſame manner as ſhall be explained there.

If *a melancholick, thick, burning and malignant blood* contained in *the meſaraick veins* as hath been ſaid, by its *vapor* do produce the ſaid *hypochondriacal melancholly*, although it be *milder* becauſe 'tis ſomtimes mitigated or ceaſeth, than *the true one* ſeems to be, yet it is alſo very *grievous*, both becauſe it doth not only diſturb the mind but alſo induceth ſo many other affects offering themſelves eſpecially about the natural parts, as hath been expounded; and becauſe tis an evil ſo pertinacious & laſting, and ſo hardly admitting of cure, and that therefore, becauſe the matter of it lying hid in the meſaraick veins and being ever and anon new, increaſed from the excrements of things taken continually heaped up, and cannot be drawn forth *by drawing of blood* unleſs this be done by *the hemroidal* veins, nor doth eaſily give way *to purgers*, as alſo we have demonſtrated in *Feavers* that the cauſe of continuance of a *quartan Ague* doth happen by occaſion of this place. & almoſt the like matter, into which alſo this affect is often changed, if putrifaction invade the blood, or otherwiſe it breeds obſtructions and tumors of the neighboring bowels, the Spleen, Liver, and of their veins, and ſometimes by its vapor infecting the maſs of blood in the reſt of the body, it is converted into *the true and perſevering melancholly*.

The ſcope of curing conſiſts in this, that *that melancholick matter* contained in the meſaraick veins, *be emptied* either *by bleeding*, or by calling it forth to the ſtomach and Guts, *by vomit*, and *ſtool*, with thoſe things which open obſtructions and ſolicit nature to excretion, than *by preventing* that new matter be not generated again, by ordering *a good concoction*; and *by diverting the vapors* that they be not carried upwards, and diſturb *the head* eſpecially, and create trouble alſo to *the heart*; and *by ſtrengthening theſe principal parts, and providing for the ſtomach, Liver, Spleen*, that they be not hurt.

Taking away of blood would be very convenient, if it could be done from *the branches of the Vena porta*, which ſeeing they can be opened no where unleſs about the Arſe, or the mouths belonging to the Stomach and Guts, and this unleſs nature do it of her own accord, 'tis dangerous to attempt otherwiſe with *medicines* which muſt be highly acrid, as *Coloquintida* (unleſs things vehemently bitter could do it) as *Aloes* which is wont to open the veins, and is convenient here alſo as ſhall be ſaid) nothing wil be more excellent than to open *the Hemorrhoids*, unleſs they flow of their own accord, by applying of *Leeches* or by *other applications*; and if they ſwell, and appear, by *Section*: the which flowing either *of themſelves* or being opened by *force* this affect hath been often cured, which before could not be cured; alſo by the courſes Women will find very much help, ſeeing it is a natural evacuation, if being ſuppreſt they be provoked, becauſe by theſe alſo perhaps the meſaraick veins may exonerate themſelves; but to open the other *cutaneous veins* which are *branches of the Vena Cava* unleſs *a plenitude* perſwade it, or that *blood* alſo be already *infected* is, otherwiſe ſupervacaneous.

A Vomit, eſpecially in thoſe uſed to it, and the evil being now very far protracted, is very convenient, becauſe the excrements which in thoſe places are continually almoſt collected at the firſt concoction, are ſuddenly caſt forth, and ſomtimes the matter retained in the meſaraick veins alſo, by this paſſage, as was ſaid in *intermitting Feavers*, or ſome part of it, eſpecially the chollerick, the which notwithſtanding may be ordered with *gentler things* at firſt, afterwards if they help not, with *ſtronger* in *ſtrong bodies*.

An irritation and laxation of the belly do revell the vapors flying upwards, and makes a way for the wind generated of them, as alſo from crudities to break forth and it wil do ſo much the more good, if the belly be bound. This is done by *Supoſitories*, and to more benefit with *Clyſters*, which ſeeing they do wholly enter the Guts, they do empty part of the filth from the meſaraick veins alſo; which if they be caſt in *every other day* or daily, it wil be far ſafer than to give things *too much purging*, which they loath at laſt, and by reaſon of the long continuance of the diſeaſe do ſcarce endure, and ſo to draw down the matter ſucceſſively from the neighboring parts to the Guts, wherefore they muſt be often repeated, which are prepared after this manner, *of things moiſt, lenitive, diſcuſſing, wind-ſtimulating, and purging*. Take *of the leaves of Mallows, Coleworts, Mercury or Beets, of each one handful*; *roots of Oak fern one ounce, Dodder of Time or Vetches, Time, of each two drams*; *Flowers of Chamomel, Feverfew, Dill, Violets* (by reaſon of the heat) *of each one pugil*; *of Bran one pugil*, make *a Decoction*, and in *a decent quantity of that ſtrained*, diſſolve *Honey of Roſes one ounce, red Sugar half an ounce, Hiera Picra, two drams, Oyl of Lillies, Chamomel one ounce and an half*; *a little Salt*, make *a Clyſter*: if *you would evacuate ſtronger*, in *the Decoction* add *Fumitory and Senna* (we omit *Hops* be-

cause they assail the Head) and dissolve *Confection of Hamech*, or *the juyce of Mercury*, &c. as shall be explained in the *Clysters in Melancholy*.

Purging must be used which may drive forth the matter from the Mesaraick Veins and often reiterated by course, the passages being first opened which are wont to be obstructed, and the humor prepared for Evacuation, yet we must have a care of things strongly Heating, Drying, because they increase the Disease, administring them almost after the same manner, as they ought to be used in Quartane Feavers.

It shall be prepared therefore with this Julep taking it for some daies before Purging: Take *of Syrup Byzantine simple, Endive, of each two ounces; sweet smelling Apples, Dodder of Time, of each half an ounce; the waters of Bugloss, Succory, Fumitory, of each three ounces:* Make a Julep, Aromatise it with Pouder of Diarrhodon, or let him take a Lozenge of it afterwards.

Such a Decoction may be given instead of that after the same manner. Take *of the Roots of Grass, Asparagus, Borrage, of each one ounce; Liquoriss half an ounce; Endive, Succory, Maiden-hare, Ceterach, Betony, of each one handful; Flowers of Borrage, Bugloss, Scabious, Tamarisk, of each one pugil: Rosemary flowers, half a pugil; the four greater cold Seeds, Annis seed of each two drams; Fennel seed one dram:* Make a Decoction, and in *one pound* of it add, *of the juyce of Apples boyled away to a third, three ounces:* Aromatise it with a little *Cinnamon*.

Or, Let them use it with *Wine* if they would open more vehemently, after this manner, with better success for the most part, because our *Wine* doth not heat so much, as hath been said elsewhere: Take *of the roots of Succory, Grass, of each one ounce; Elecampane* (because it makes merry) *two drams; Miltwaste, Asparagus, Germander, Fumatory, of each two drams; of the Cordial flowers, of each one dram and an half; Fennel seed one dram:* Being bruised, infuse them in common *white Wine*, or if it be *stronge dilute* it, let him use it four or five daies in the morne.

Let him be Purged then with a gentle Decoction, for the evil is exasperated by strong Medicines, of which sort this of many is convenient. Take *of Senna cleansed, Oak ferne, wild Saffron, of each half an ounce; Dodder of Time two drams, Raisons twenty, Prunes ten, fresh Borrage Roots one ounce, Liquoriss one ounce, of the Cordial flowers, of each one pugil; Annis seed half an ounce.* Make a Decoction in *Water* and *white Wine*; in *four ounces of that strained*, Dissolve *of Catholicon half an ounce*, or *syrup of Roses solutive one ounce.*

Or let him use this following: Take *of Catholicon one ounce, Confection Hamech one dram and an half, Syrup of Roses solutive with Rhubarb, infused one ounce with the waters of Bugloss, Fumitory as much as is sufficient, and a little Cinnamon*, to Aromatise it.

Purgers must be repeated by course in a long continued Disease, especially if he will not use *Clysters*, or they must be used successively, that the obstructions being taken away, and Nature constantly solicited may the rather cast off the Excrements to the Guts from the Mesaraick Veins; and that *in divers formes of Syrups, Wine, Pills* so prepared that they may be kept long for use: before which preparatives ought alwaies to be premised for some daies, or must be mixt together with them in the Compositions of which we will bring these few examples.

A thickned Syrup therefore may be made thus, which he may use every other day or three daies together; and after some few daies repeat it: Take *of the Roots of Grass, Succory, of each one ounce; Fennel, Parsly, of each half an ounce; Orrice two drams, fresh Borrage one ounce and an half, Asarabacca two drams, the bark of Capers, Tamarisk, of each half an ounce: the herbs of Fumitory, Hops, Germander, Ground-pine, Milt-wast, Betony, of each one handful; the four Cordial flowers, and of Tamarisk, of each one pugil; Annis seed half an ounce, Fennel seed two drams, Raisons one ounce, Senna two ounces and an half, Oak Fern, wild Saffron, of each one ounce and an half; Dodder of Time half an ounce:* Make a *Decoction*, and in that *Strained*, infuse *Rhubarb two drams, Agarick three drams, Cinnamon one dram, Ginger half a dram; the juyce of Apples thickned three ounces, of Borrage one ounce, Sugar three ounces:* Make a Decoction to the thickness of a Syrup; give *two ounces*, more or less as it shall work, dissolve it in *Water, Broth*, or *Wine*.

Matthiolus doth very much commend *Syrup of Oak Fern* against this affect.

A Wine may be prepared of the same thing dryed and infused, adding *Wormwood three drams, Marjoram one dram:* But because it corrupts being long kept, let only one half of it be infused, and let him take it for two daies, afterwards when there shall be need again, make a new infusion of the other part.

Pills in this case as in all the like obstructions are most profitable, the which provoke both the *Hemrods* and *Courses*: Take *of Aloes two drams, Myrrh half a dram* (against putrid Humors) *Dodder of Time one dram, Roots of Gentian, Asarabacca, of each half a dram; Gum Ammoniack dissolved in Vinegar one scruple* (if there be a hardness about the *Glandules of the caule and Mesentery*, as oftentimes there is) *Parsly seed half a dram, Choice Rhubarb one dram and an half, Spike one scruple. With juyce of Wormwood*, Make a Mass, let him take *two scruples* every other or third day. *Mesues Tryphera of Dodder of Time* if it be given every other day *is a singular remedy in Hypochondriacal Melancholy.*

After the use of *Purgers* let *the Patient be strengthened* the next day, by using *Conserves of the roots of Bugloss, or some such like.*

In the interim that the obstructions may be dissolved, and the matter be called forth from the Mesaraick Veins to the Guts, remedies must be applied to the whol Belly, because through that, the Mesaraick Veins do enter into the caul and Mesentery.

And first make a Fomentation after this manner, with which the Belly may be fomented warm with a Spunge, once a day before taking of meat, or twice in the morning and evening at the first: Take *of the Herbs Wormwood, Southernwood, Feverfew, Time, of each one handful; Flowers of Chamomel, Melilot, Elder, Broom, of each one pugil; Bay berries one ounce and an half, Annis seed two drams, the Bark of Danewort, Roots of Oak ferne, Senna, Dodder of Time, of each three drams;* Make a *Decoction in equal parts of Water and Wine*, adding *a little white Wine Vinegar or of Squils*, for a *Fomentation.*

Instead *of a Fomentation, a Bath of sweet water, and other temperate and moysting things* is convenient.

After *the Fomentation or Bath let the Region of the Stomach, Hypochondries and Belly be anointed with such an Oyntment:* Take *of Oyl of sweet Almonds, Chamomel, Dill, of each one ounce; of bitter Almonds, Elder, Capers, of each six drams: of Orrice, Spike, of each half an ounce; juyce of wormwood one ounce, white Wine Vinegar of Squils one ounce;* Boyl them *to a Consumption of the juyces*, add *Gum Ammoniack dissolved in Vinegar one ounce, Asarabacca root one dram, seeds of Gith, Colewarts of each half a dram, Saffron one scruple, Wax as much as is sufficient:* Make a *Liniment.*

Cupping Glasses sometimes applied *on the Belly without Scarification, with much flame*, do egregiously discuss wind, and call forth the matter.

Rubefiers also upon that accompt are sometimes applied.

plied, amongst which the *Plaister of Mustard seed* is very much commended; there are also who do apply *Vesicatories. Pication* made on the Belly being first anointed with Oyl, is very much approved off in some.

But that matter may not be continually heaped up a new, we must take care *by a good Course of Dyet of good juyce, temperate*, and *no waies windy*. Upon which account *those things which discuss wind, as Annis seed, Fennel seed, Carawaies, Pepper, Ginger* are added *to the Meats*, yet in *that quantity that they do not to much inflame* which we must chiefly have a care on for which cause also if they can intermit the use of *Wine, Rhazis* saith they need no other Medicine, he understanding *strong wine*, because that which is *thin* and *gentle* can no waies hurt especially those that are accustomed to it.

Last of all the Vapors and Wine may be discust by giving a Pouder every other day after Meat or before, the weight of one spoonful, which may be prepared thus, Take *of the seeds of Annis half an ounce, Fennel two drams, Carawaies one dram, the Cordial flowers, of each half a dram*: Make a *Pouder*, add *of the Tables of Sugar Rosate two ounces*.

We must divert the ascent of Vapors with Frictions, Ligatures, and Lotions of the extream Parts rightly applied to their due time.

We must also *have a care of the principal parts; the Head, Heart, Stomach, Spleen, Liver*, which are at last hurt by the long continuance and Malice of the Disease; *by watring, Anointing the Head* which is chiefly affected, as shall be said in the true Melancholly; by strengthing also the Heart with Epithems, Bags, which is hurt and palpirates by reason of these Vapors: by comforting the Stomach which belches being troubled with wind, with external and internal Confections that further Concoction, yet not too hot: and by taking care that the Liver and Spleen be not hardend, by external and internal means, as shall be propounded in their faults of this Nature.

The Cure of Melancholly and Madness, from a Melancholly a Humor troubling the Spirits.

A Melancholly blood in the Vena Cava, such as we have described to be Malignant, abounding either in the Head or about the greater Veins of the trunk of the Body, or about the Womb in the Blood there, which is the matter of the menstruous Blood and Seed, producing a Melancholy or Madness, if it be worse, because it can hardly all be drawn forth as long as there yet remaines some portion of that blood, so long that pertinatious and long continued evil lasts; with which ostentimes they are miserably afflicted, not only for some months but years also somtimes to the end of their life; and if they be Mad, they are kept incloſed in Prisons, nevertheless performing the other Vital and Natural actions; unless these be weakend, because when they are troubled in Minde they offend in many things, and because they waist themselves with grief if they have yet any Reason left: therefore we ought not rashly to promise any hopes of recovery, although we have known many Cured as shall be said especially by large Bleeding, and some Mad and Raging from their youth until extream old age, in which they have so come to themselves, that afterwards going about free from their Prison and Bands, they would no more hurt any Body, or provoke them with words; and then also there is better hopes, if they yet act all things moderately, and do things rather laughing then with a sterne look, and are somtimes obedient to those that admonish them, and do admit of Medicines.

The Method and Indication for Cure will be such; that we Evacuate that matter out of the Veins and divert it from the more Noble Parts that are hurt by it, from the Brain chiefly and the Heart; for as experience hath taught that other Diseases also generated from a certain Malignant matter are somtimes cured by many Evacuations (as is apparent in the French Pox) so we have seen ostentimes both in Melancholly and Madness proceeding from this Malignant matter that Empericks by many and frequent Evacuations have cured many left off by other Physitians, who were afraid to use them, and we our selves have often tried it with happy success, which may be done by divers forms and manners as by drawing blood from the body, or deriving it to other places by Purgations made by stool and by vomiting; then we will correct with things altering or changing that distemper or Melancholick constitution in the Blood almost of the whol Body, and in the principal body, and in the principal bowls especially the Brain and Heart, by giving of Medicines and applying outward helps to the Head, Heart, Liver, Spleen, and certain other parts of the Body; also with actual operation by gelding, and hanging on Amulets, in the interim providing for the strength also by a fit course of living which also may correct these faults. Last of all we must have respect unto some other Symptoms which somtimes are supervenient to them, all which how they must be prepared and administred we shall explain in order.

Letting of blood therefore in some great and apparent Cutaneous Vein when as it may not only Evacuate the Blood but together with that the matter of this Disease lurking in the Veins, it will be the prime and principal remedy for the Cure of these affects, if they proceed from this cause; which though very many I know have not taught it, and some also have disallowed it, yet I have known by long observation that innumerable have been cured by this means, by certain Chyrurgeons or others who did professedly labor in curing these Diseases, who by opening of a Vein twenty nay sixty times have so restored the perfectly Mad or Melancholick, that afterwards they have yet lived in health a long life; who were not Scrupulous in choosing some certain Vein but somtimes opend a Vein of the Arm, by and by this or that in the Foot, anon in another place without any difference, which kind of remedy therefore we also ought to use and no waies neglect, but with greater care and providence then they who undertake to cure only those who are as it were given over, Methodically premising alwaies washings of the Belly, and Purgations intermixt, as shall be said.

Therfore some Vein of the Arm which is most apparent must be first opened and reiterated; next must be opened a Vein in the Hand especially the Salvatella of the left Hand, privatly for the Spleens sake, with which it is thought to have consent; and also in the Feet the Vein of the Ankle called the Saphæna and the sooner if the Courses flow not right; or that which runs to the great Toe which Empericks do open chiefly in this case, because it is thought to communicate with the Head. Also the Vein of the Forehead, if the Evil do continue, and the Cause be discovered to lie chiefly about the Head, must be opened, and Blood must be provoked from the Nostrils, by thrusting of Bristles, applying of Leeches, and putting up other rough things, also knotted Veins appear in the Thighs or else where seeing they contain a great quantity of this like Melancholick matter thrust thither by nature and there heaped up, they must be opened and the filth must be let out this way, which cannot but profit very much; a Provocation of the Courses if they be not decently purged, or be stopt, wil help much, seeing they may be the cause of this evil

as

as hath been said; also the opening of the Hemorrhoids, although they be branches of the *Vena porta* in those that are accustomed to them wil help very much: Hither also may be refer'd Scarifications, made especially in those places where otherwise we ought to open a Vein, as in the Arms and Feet, or somtimes where we are not wont to open a Vein as in the Shoulders, which certainly do not only evacuate the blood, but if Cupping-Glasses be applied, they do also egregiously revell the matter from the Head, and as I have observed do oftentimes profit much.

Upon which account also are applied, Frictions, Dropaxes, Vesicatories, Cauteries and Cuttings made in the Head, and Trepanning in those that are desperate, part of the bone being taken away, and the hole left open for a month.

It is conveninent to Clense the Guts often from their excrements with Suppositories and more rightly with Clysters, which although they do not so much empty the Melancholly matter lurking in the more distant veins, as they do in the Hypochondriacal, in which it is neer to the Guts, yet before Bleeding and other Purgations, that they may succeed the better, 'tis safer first of all to bring forth the thicker excrements by Clysters, to which sometimes we must mix those things which are good to evacuate Melancholly, which being continued will effect something also in a cause more difficult.

A more simple one therefore which is most excellent Egregiously stimulating may be made thus, Take *of juyces of Mercury or Beets two ounces, Mallows one ounce, common Honey two ounces,* let them be dissolved *with the fat and salt broth of flesh,* and let it be given.

A more Compound one may be made thus which he may use by course, which is Emollient purging and stimulating, Take *of the herbs Mallows, Orach, Bleets, Beets or Mercury, both Buglosses, Fumitory, of each one handful; flowers of Chamomel, Melilot, Elder, of each one pugil; Figs twelve, Bran one pugil, Flax seed half an ounce, Mallows, Fennel, of each two drams;* make *a Decoction,* dissolve *Honey of Violets or Roses two ounces, juyce of Mercury or Beets one ounce, Benedicta Laxativa two drams, Oyl of Chamomel, Butter, of each one ounce and an half; a little Salt,* make *a Clyster.*

In Mad Folks especially, it shal be prepared of stronger Purgers, thus, Take *of the roots of Marsh-mallows one ounce, the herbs Mallows, both Buglosses, Mercury, Hops, Fumitory, Time, of each one handful; flowers of Chamomel, Elder, both Bugloss, Violets, of each one pugil; Flax seed, Guords, of each half an ounce; seeds of Mallows, Fennel, of each two drams; seeds of Rue, Chast tree, of each one dram; Figs twelve, Tamarinds half an ounce, Bran, Barley, of each one pugil; Oak-fern, Senna, wild Saffron, of each six drams; white Hellebore half a dram, or black one dram,* make *a Decoction,* dissolve *Honey of Violets, red Sugar, of each one ounce; Hiera of Coloquintida, Diasena solutive, Confection Hamech, of each two drams; juyce of Mercury one ounce and an half, Oyl of Violets, Chamomel, Lillies, of each one ounce; Salt as much as is sufficient,* make *a Clyster.*

'Tis convenient to Purge this Matter out of the Veins beginning with the Gentler and going to Stronger, and continuing them for a long time, for they can endure it for the most part easily, and though they be somwhat weakned, nevertheless it doth good, seeing upon that account they become more calmed and quiet, neither can it hurt them much, seeing they may also be continually refreshed: therefore the humor being first prepared, Evacuation ought presently to follow, being administred once, twice, or thrice together, and this must weekly be repeated once or twice, intermixing letting of blood, as hath been said; and once in a month also as *Avicen* teacheth, we must give a very strong Purger, for the chief nature of the Cure consists in those great Evacuations of the blood and Excrements, whence successively the matter of the disease is taken away as hath been said.

The Humor is prepared before Purging, by observing whether they be very Cholerick that are affected with this evil, for then we must use things more Cold and Acrid, after this manner. Take *of Syrup of Violets, Borrage, of each two ounces, of Vinegar simple one ounce, the waters of both Buglosses, Lettice, Water-lillies, of each as much as is sufficient,* make *a* Julep for four or five times aromatizing it with *the pouder of the three Sanders,* or giving *a Lozenge* of it after every dose.

Or make one thus of Juyces, Take *of the juyces of both Buglosses, of sweet smelling apples of each two ounces and an half, the waters of both Bugloss, Fumitory, of each three ounces; Sugar two ounces,* boyl them, and clarifie them, and aromatize it with Cinnamon, for some doses.

By a Decoction or Infusion let it be prepared thus, Take *of the Roots of both Buglosses, Liquoriss of each one ounce; the bark of Tamarisk half an ounce, Fumitory one handful, Miltwast half a handful, the Cordial flowers, of each one pugil; Water-lily flowers half a pugil, Time one pugil,* boyl them *in common water and a Cup of Wine,* add *of Sugar and the juyce of Apples each two ounces,* aromatize it for some doses.

Or let them be infused in thin Wine adding for the scents sake a little Wormwood, and let him drink it.

Then let the Humor be purged as hath been said by giving of divers forms dedicated to the Melancholick humor, which if the Patients wil not obey, may be prepared thus, that under the form of Wine or of some other Medicine that is most familiar to them, we may be able to deceive them, many of which have been spoken of the in Melanagoge purging Remedies, here we wil propound certain choyce ones.

At the beginning therefore, the Humor being prepared let this presently be given, Take *of Catholicon one ounce, Confection Hamech two drams, Syrup of Roses solutive one ounce,* dissolve them in Whey or Bugloss water, and give it.

Or, Take *of Senna Oak-fern, of each half an ounce; Dodder of Time two drams,* infuse them in *Goats Whey* add *of fresh Mercury one ounce, Anise seed two drams, Syrup of Fumitory compound,* or *of sweet smelling Apples half an ounce,* make *a Potion.*

Or, Take *of the Pills of the five kinds of the Indian Myrobolans, of Lazulus Stones, each one scruple;* with *white Wine* make *Pils.*

That the body may be purged successively and at many times, the following things are convenient.

First a Compound Apozem which may be made thus, Take *of the roots of Polipody three ounces, the Leaves of Senna two ounces, wild Saffron seed one ounce, Dodder of Time half an ounce, Turbith three drams, Mirobalans, Indian, Citrine, Chebuline, rubbed with Oyl of sweet Almonds of each one dram; black Hellebore one dram, White half a dram,*) if you would purge *Gentler* we omit *Hellebore* if *stronger,* we increase it) *the roots of Grass, Cinquefoyl, Liquoriss, of each one ounce, Elecampane half an ounce, the barks of Ash, Tamarisk, Danewort, of each half an ounce; the herbs Mercury, Fumitory, Hops, Harts-tongue, both Bugloss with their roots, Miltwast, Maidenhair, Time, Balm, of each one handful; the cordial flowers, of Tamarisk, Scabious, Broom, of each one pugil, seeds of Anise, Melons, of each half an ounce; Guord seeds six drams, Purslain seed two drams, seed of Basil, Chast tree, of each one dram; Tamarinds, Raisons, of each one ounce and an half;* Prunes

twelve

twelve, Jujubes, Sebestens, of each ten; make *a Decoction according to art*, in *two pound of that strained*, infuse *of choice Rhubarb half an ounce, Cinnamon two drams, Spike one scruple*, strain it, add *the juyce of sweet Apples one pound*, boyl them again a little, let him use this *Syrup* for four or five daies early in the morning.

A Syrup also may be made of the same Decoction to be kept for use, with all things doubled, if a just quantity of Sugar be added to the Decoction or instead of it the Decoction of Apples, and it be boyled to a thickness: of which when you have a mind to purge you may give two or three spoonfuls according as it works.

Another Gentler may be prepared thus of the Juyces, Take *of the roots of Polipody two ounces, Senna clensed four ounces, Dodder of Time half an ounce, flowers of Borrage, Violets of each one pugil; Anise seed half an ounce, Cinnamon two drams*, bruise them a little, pour to them *the juyce of Sweet Apples three pound, the juyce of Borrage clarified three ounces*, let them stand in *a hot Infusion twenty four hours*, then let them boyl a little, strain them, boyl them again to half the thickness of *Wine boyled away*, or of *a Syrup*, let him take *two ounces* more or less *by it self* or with *Wine*.

Being Infused also in Goats Whey, they will do good, or in Broth of an old Cock, and give the Decoction.

A Wine very profitable for this use, may be prepared thus, which must be given at three or four times, seeing it cannot be kept longer, unless it be prepared in a Barrel in a greater quantity, all things being doubled or trebled, according as the quantity of Wine or Must shall be greater or less, and those things which are put in be first very wel dried. Take *of Senna two ounces, Turbith three drams, Agarick two drams, Mirobalans Indian citrine, chebulane of each one dram; Dodder of Time, Time, of each three drams; the Cordial flowers of each two pugils; the herbs Wormwood, Fumitory, of each three drams; Fennel seed three drams, Ginger half a dram*, let them be bruised and infused *in four pound of white Wine* boyl them a little in a double vessel let him drink it three or four times.

And because the Remedies ought to be changed, other forms also may be thought upon, as of the following Electuary, for tryal of which he may take at the first time three ounces, by it self or dissolved, and according to the success, increase or diminish the dose. Take *of the pulp of Tamarinds and Cassia extracted with white Wine* (for gratefulness) *each one ounce, choyce Manna, six drams, of Catholicon or* Mesues *Triphera, of Dodder of Time, or the Persian, or the great, two ounces, the bark of Myrobalans Indian, chebuline, rubbed with Oyl of Sweet Almonds of each one dram, Rhubarb a little Mollefied in wine one dram and an half, Senna first washt in wine, Dodder of Time, of each two drams; Annis seed two drams, Cinnamon three drams*: Make a *most fine Pouder, and with Syrup of Roses solutive*, Make *an Electuary*; If you would have it work more powerfully in a less quantity, Take *two drams*, and add *Confection Hamech one dram*, and give it.

Such a Pouder may be prepared to deceive the sick, which shal be given at once by it self or with Wine, broth Milk, Hydromel: Take *of Lazulus stone washt oftentimes in Hydromel two scruples, Dodder of Time one scruple, Sugar one dram*; Pouder them. Or thus: Take *of Lazulus stone prepared one scruple, Digredium half a scruple, Turbith one dram, Sugar one dram and an half*; give it: Or *a usual Compound one*, may be made thus, of which give at first *Time one dram and an half*, by way of tryal, afterwards proceeding with that quantity which shall be found righteſt: Take *of Lazulus stone often washt in wine and water two drams, Diagridium half a dram, Turbith one dram and an half, Senna half an ounce, Dodder of Time two drams, Tartar one dram, Annis, Cinnamon, of each two drams; Saffron half a scruple, Sugar-candy, the weight of them all*, pouder them.

Lozenges may be made of them, or others may be given such as are, the Tablets of the Electuary of Citron &c.

Vomiting caused somtimes doth very much good, seeing it doth egregiously solicite nature to excretion, especially if it be provoked by giving of those things which do at once empty upwards, whenas they being more robust do easily endure these also, as hath been said in Purgers, but amongst the rest Hellebore especially is so much commended in Madness that it is become a Proverb, Those who are Mad have need of Hellebore, but it is given divers waies, as when we would purge more by the lower parts we rather choose the Black as hath been said in Purgers, but if we would chiefly cause Vomiting we take the white, the Pouder of which or rather the Infusion in Wine is most conveniently given, when they have eaten much and drunk Broth, that they may be hurt the less: or the slips or fibres of it thrust through thin slices of Radish and left all night, and afterwards diligently taken out again and the slices steeped in Oxymel, and so give one of them to drink.

This following Helleborism is very much commended by many, if one spoonful of it be given with fat Broth, Take *of the shavings of Hellebore one ounce*, infuse them three daies in *Rain-water four ounces*, boyl them with a gentle fire to a third, to *that strained* add of *Honey wel Skimmed two ounces*, keep it for your use.

But if we be minded to empty downwords also, give one spoon ful of this following, Take *of the pouder of Hiera of Coloquintida four scruples, Dodder of Time, Senna each two drams*, make *a pouder*, mix it in *Honey of Hellebore*.

Now they often give for this use, the Pouder of Stibium burnt til it looks cleer or only lightly calcined, as I have tried it, in a few grains, or the Infusion of it in Wine, from whence they are wont plentifully to Vomit, and send downwards Cholerick, Yellowish or Green matter, the which also *Mathiolus* commends and I have often tried it in strong bodies without any hurt.

The Medicines which they ought to take for alteration sake, are prepared of those things which by a temperate Moisture do correct the force of this filthy and acrid humor, and by a propriety its Malignity: and amend the distemper of the brain which is chiefly affected, and the heart whose complexion in these cases *Avicen* thinks is chiefly corrupted, having respect also unto the Spleen where they think the seat of Melancholly, and the Liver which they Suppose also to be affected by reason of that, of which these Medicines are made up, which if we consider the accustomary Compositions, they are almost wholly Cordial, the which seeing they do not only refresh, but also do resist the malignant and venenate matter, of which sort this is, we also do allow them, but shunning things too hot and dry, and do prescribe them as followeth.

For an Infusion in Wine or Decoction the which either we use simple, adding Sugar Spices, or to make a Syrup these things may be taken, to be used by course, Take *of the flowers of both Buglosses* (which are appropriated to the heart and Spleen) as much as is sufficient, let them steep in ordinary Wine, or let them be boyled in Broths.

For the same reason also other things may be infused

in Wine as the *Leaves of Harts-Tongue*, which the common people is wont to do in this case.

A more Compound infusion or Decoction may be made thus: Take *of the flowers of Roses, Violets, both Buglosses, Scabious, Tamarisk, of each one pugil; the Leaves of Betony, Balm, Harts-tongue* or *Milt-waist, of each one handful; the Root of Elecampane two drams, the seed of Basil one dram*: Bruise them for your use.

A Syrup may be made of this Decoction as hath been said, or the following be prepared of Juyces: Take *of the Juyces of sweet Apples one pound, of Borrage three ounces, of Mallows* (which is thought very profitable) *two*, clarifie them and adding, *Sugar half a pound*: Boyl them to a consistence.

We use also *Juleps* rather, then those *Compound Cordial waters* which some prescribe, because they too much inflame the Body: Take *of Rose water three ounces, Buglos. two ounces, Balm one ounce, Cinnamon half an ounce, Orange flower water* (which they cal *water of naffe*) *two drams, whitt wine one ounce, the whitest Sugar* as much as is sufficient, Make *a Julep*.

Electuaries to be taken by course every other day, drinking after a little of the said *Julep*, or its *water* with a *little wine* are made thus, of fewer or more things. Take *of the conserves of Roses, Violets, the flowers of both Buglosses, Water Lillies, the Roots of Buglos and Citron Pill candied, of each half an ounce, the Root of Elecampane one dram, seed of Basil one dram, Powder of Diamargaritum Frigidum one dram, with Syrup of sweet Apples*: Mix them.

Another made of many rare and pretious things, is thus prepared: Take *of the Conserves of the four Cordial flowers, of each one ounce, Conserve of water Lillies, Scabious, Clove-gilli-flowers, Tamarisk, Succory, Lange-de-boef, Eringoes, Satyrion, Rose-mary, Betony flowers, of each half an ounce; the Roots of Buglos, Lettice, Coleworts, Guords, and flesh of Citrons, Citron pill condited of each one ounce, Emblick Myrobalanes two, the seeds of Guord and Melons clensed, of each half an ounce, Citron seed clensed one dram, seed of Basil one dram and an half, seed of Lettice one dram, kermes Berries two drams, sweet Sanders half a dram, Cinnamon one dram, shaving of Harts-horn, Ivory, of each one dram*; *Unicorns horn* (for Rich men) *one scruple, Red Coral one dram, the Powder of Diamargarorum frigidum* or *the Electuary of Gems half a dram, Rosata Novella, Diasmoschum, Diarrhodon, Aromaticum Rosatum, Trionsantalon, of each one scruple, Trochisks of Camphire two scruples, Confection of Alkermes and Hyacinth of each one dram, Rhases Laetificans two drams, with Syrup of sweet Apples boyled thick*, that the Confection which ought to be kept a long time be not corrupted, Make *an Electuary*.

Theophrastus commends *Southern-wood* taken with *Honey* and *Vinegar*.

We may also use Pouders, and adding *Sugar one ounce and an half*, to *one dram* of them, Make *Comfits*, or dissolve the *Sugar* in the *Waters* and *Julep* expresst, to make *Lozenges*.

The first shall be such; Take *of the Roots of Swallow-wort one dram, Citron pill, seeds of Basil, of each half a dram, Pearl half a scruple*: Make a Pouder for use as hath been said,

Or thus, Take *of the Cordial flowers, the Leaves of Balm, Marjoram, of each one scruple, Citron pill, Basil seed, of each half a dram; sweet Saunders one scruple, shaving of Ivory one scruple, Coral half a dram, Pearl half a scruple, Cinnamon half a dram*: Make a Pouder.

Or out of the usuall Pouders, as *Diamargariton*, or the *Electuary of Gems* and other things in the said *Electuaries* both *Pouders* and *Lozenges* may be made.

Lozenges made after this manner are very Cordial and appropriate to the Head: Take *of Confection Alkermes* or *of Hyacinth one dram, Pouder of Diamargaritum Frigidum, Electuary of Gems, of each half a dram, Diamoschum, Aromaticum Rosatum, of each half a dram; seed of Basil one scruple, Sugar dissolved in the Juyce of sweet Apples as much as is sufficient*: Make *Lozenges*.

Remedies are outwardly applied to the Head in which the Brain residing is alwaies affected in these Diseases, either by it self or by consent, and where sometimes the cause of the evil lies hid.

And first of all at the beginning use only *Repellers* if it be *Hypochondriacal Melancholy* from a Vapor lifted up, or *a great fury* in *Madness*: then in the beginning we use an *Oxyrrhodine* to which notwithstanding we add *Oyl of Violets* and *Chamomel* that it dry not too much.

Or we anoynt the Head with *Oyl of Roses, Myrtles, Quinces, Violets* and *Chamomel*. But afterwards we must use things very moistning which may also dissolve a little, and strengthen the Head, and also cause sleep, because they are much troubled with watching. Let *Irrigations* or *Embrocations* be made which are more accustomary to our people, or washing and wetting of the Head, and that once a day, or twice, Morning and Evening for many daies, according as we conjecture there is more or less need by their watchings and restlesness; the which also if we use with a *Bath* before and after the use of it, as shall be said we must irrigate the Head with the same *Bath*.

But here we do no waies use Lyes, because they dry too much, but the following *Decoctions*; Take *of the Roots of Marsh-mallows one ounce, the Herbs of Violets, Lettice and Mallows, of each one handful*; *Flowers of Violets, water Lillies, Burrage, Chamomel, Melilot, Barley, of each one pugil; Flax seed one ounce, (Fenygreek* by reason of its strong smel we omit) *Poppy half an ounce*: Make *a Decoction* in *the Broth of a Calves Head and Gethers*, add *a little Wine* for an *Irrigation*.

Another when we would also procure sleep, which for the most part is necessary: Take *of the Leaves of Willow, Lettice, Violets, tender Rushes, flowers of Violets, water Lillies, Chamomel, Feaverfew, Time*, (especially towards the end) *of each one pugil, Guord seeds bruised one ounce, Coriandar two drams, seeds of Lettice, Marsh-mallows, Dill, of each one dram, of the bark or Heads of Poppy* or *Roots of Mandracke one ounce, the Leaves of Henbane one handful*: Make *a Decoction in the Broth of the Head and Feet of a Weather*, or *a Calf*, or *of Chickens*, or *Swallows*, or *of a Rams Lungs*, adding *a little Wine*,

Or thus, Take *of the Emulsion of the seeds of white Poppy and Guord seeds made in Violet water three ounces, Milk two ounces, the Mucilage of the Seeds of Fleawort one ounce*, stir them together *and apply them*.

A profitable *washing* or *Embrocation* may be thus prepared out of *Unctuous things*: Take *of Oyl of Violets, Lettice, of each two ounces; Chamomel one ounce, the whites of Egs well beaten two, Womens Milk or other Milk four ounces or more*; Mix them deligently.

An Unctuous anointing or application to the Head may be made about the Temples, Forehead, and if it be shaved, also on the Hairy part, for the same intention, after irrigation when it is dry again, or else without it, oftentimes by it self, after this manner: Take *of Oyl of Violets, Water Lillies, sweet Almonds, of each one ounce; Chamomel half an ounce, fresh Hogs grease one ounce, the Mucilage of Flax seed one ounce, white Wax as much as is sufficient*: Make *a Liniment*.

A more simple one but nevertheless effectual, may be made thus: Take *of the Mucilage of the seed of Flax, Fenugreek, Mallows, Butter, of each two ounces: Hogs-grease four ounces, the Marrow of an Ox or Hog one ounces* apply it.

But

But a Compound one and more effectual, will be this: Take *of Oyl of Violets, Guard seeds, of each two ounces; of Poppy seed half an ounce, the Mucilage of the seeds of Fleawort one ounce, of the seeds of Lettice, Henbane, of each one dram*; *Coriander, Myrtles, of each half a dram, Saffron one scruple*: Mix them:

Or if they be very much troubled with Watchings: Take *of the seeds of Henbane, white Poppy, of each two drams*; *Mandrake Root one dram, Opium half a scruple, Saffron six grains*: Mix them with *Oyl of Violets one ounce Chamomel half an ounce*: Apply them to the Region of the Head.

About the declination hotter things must be added, in *Irrigations and Oyntments*, made *of Time, flowers of Rosemary, French Lavender, Lavender.*

And to strengthen the Head, we must strow the following Pouders on the Hair at night, and in the morning by gentle combeing clense them again: Take *of the seeds of Coriander half an ounce, Myrtles two drams, of Lettice, white Poppy, of each one dram; Alkermes berries two drams, flowers of Violets, Roses, each one dram and an half*; *flowers of Rosemary, Chamomel, of each one dram; Citron pill one dram, Mace, Cloves, of each one scruple*: Make a Pouder.

It will be very convenient in a high Fury and Madness, if we apply to the Crown of the Head, the Lights of a Ram newly taken out, whiles they are yet hot, or if they be cold, heat them again, or apply a Lamb so cut open through the back and Emboweld, or we may lay on the Head a young Pegion cut in the middle and sprinkled with the Pouder of Henbane, and other things which shall by and by be spoken of in a Phrensie we may use for the like reason.

The heart also which we have taught is affected and troubled in these affects, as it hath been demonstrated that it ought to be strengthned by things taken, so it must be furnished with External things endued with the same vertues, that it may be able to resist this venemous humor.

Epithems received as they ought to be in fine linnen must be applied to the Region of the Heart, whiles they are yet fasting, or to the Pulses. such as these are: Take *of Rose water three ounces, of Violets, water Lillies, Buglos, of each two ounces*; *Balm one ounce, the juyce of sweet Apples, Odoriferous wine, of each one ounce; Vinegar of Roses of each half an ounce, Seeds of Basil two drams, of Sorrel one dram, Wood of Aloes and Musk, Sanders, of each half a dram, Trochisks of Camphyre, Pouder Diamargaritum Frigidum, of each half a dram*: Make an Epithem, *Saffron* should be added; if its yellowness, with which it stains things did not hinder, and *Ambergrease*, also if it were not too dear.

Two Cordial bags may be prepared of a square figure, guilted as they ought to be, one of which ought to be sprinkled with Wine and Rose water, and if it be too moist, to be squeesed and so applied dayly, and when tis removed, the other dry one must be laid on and worn continually.

Which may be made thus: Take *of the four Cordial flowers, water Lillies of each one dram; Rosemary flowers one dram, the Leaves of Balm, Marjoram, Coastmary of each one dram and an half*; *seeds of Basil, Citrons, of each two drams, Sorrel, Lettice, Purslane, of each one dram*; *Alkermes berries one dram, Musk Sanders one dram, Wood of Aloes half a dram, Cloves one dram, white and red Ben, of each half a dram*; Pouder them for your use, also the usual Cordial Pouders, *Diamargaritum, de Gemmis*, and others may be added.

The Liver and Spleen must not be neglected, as being principal parts also if they suffer a preternatural heat, or any hurt from this filthy humor, but they must be refresht also with Epithems and Oyntments.

Also remedies applied to certain other parts of the Body may correct its perverse distemper, and refresh it, as if the chief part of it be plunged in a Bath the Feet be washt, the Back bone and Breast be anointed.

A Bath of River water will do good in young and strong bodies being sometimes repeated, by swimming in it for a while when it is fitting by reason of summer or by setting in it at home being made warm; or if by the addition, of moistning things, it be made Artificial, let the patient set in it warm a little while before meat, and afterwards let him rest in his bed, and without using any force, let him sweat of his own accord.

As this is, Take *of the Herbs Mallows, both Buglosses, Sallow, the Vine, Lettice, water Lillies, Violets of each one handful; flowers of Chamomel, Melilot, of each one pugil, Marsh-mallow roots two ounces, Flax seed one ounce*: Let them be boyled in River or Rose Water, to which may be added some fat or glutinous Decoction, made with the parts of living Creatures, or Milk for Rich Folks.

With the same Bath the Head may be irrigated, and the Feet washed.

The length of the Back bone under which lie the Trunks of the *Vena Cava* and the great Artery, in which the principal cause of the Disease is, after bathing is anointed,

After this manner: Take *Oyl of sweet Almonds two ounces, Violets one ounce, Hens grease one ounce and an half, white Wax a little*; Mix them.

The Breast being anointed with the same, it will benefit those parts.

Gelding was wont to be used by the Antients in certain desperate Diseases as was said in an Epilepsie, because it changes the temperament of a man, quels his virility and vehemency, and renders the Body more lax and moist, in mad Men especially that have been long imprisoned and are disperate, being otherwise unserviceable, it is good to see what benefit can be reaped by it, the which all circumstances being diligently examined tis lawful to make tryal of, if other things help not.

Amulets must not be neglected, amongst which they write thus of one; that Stone found in the Mawe of a Swallow which is red, tied to the right Arm, is good against the Phantastical Illusions of Melancholy, cures the Lunatick and Mad, and makes them lovely and pleasant.

The Course of Living or Diet, must be so ordered, that both laudable humors may be generated, and the Malignant distemper of others and evil constitution of the Body may be amended and contemperated, and the strength refreshed, which may be done thus.

An aire and place temperate and pure are convenient; and also the changing of these do very much good, especially if certain places be suspected, or be contrary to them, or do afford some occasion of sadness by which alone Diseases otherwise of long continuance and very grievous, are oftentimes cured.

Nourishing Meat that is by its Nature of a temperate moisture is good, which ought to be of a good juyce easie of disgestion and somwhat moist, such as is the flesh both of Animals and Fishes, not that which is old, and hard, and kept a long time, or smoak-dryed, or too salt, or very much seasoned with Spices or other hot things, but that which is young, fresh, and simply boyled or roast, amongst which the flesh of a young Hauk and Night-Owl being eaten, it is thought to be of force by a propriety, as on the contrary the flesh of Goats, wild Beasts, Hares, are thought to be hurtful for the

the cauſes forementionꝺ; Milk, good Cheeſ, not too much ſalted, nor rotten, Butter, common Oyl, and Oyl of Almonds may be granted to thoſe that are accuſtomed to them.

Eggs alſo are convenient unleſs they do corrupt, as it moſt eaſily comes to paſs in cholerick Stomachs, Bread made of pure flower, not tainted with the faults of grain, whence by reaſon of Darnel many have been brought to a Stupidity or Madneſs, Levend a little, ſalted and rightly baked, is good: and of Grains and Pulſe, Barley and all kinds of Pears, ſo boyled and prepared that they may eaſily be diſgeſted, and do not puff up, but Lentils and Beans are diſallowed becauſe they are thought to beget a Melancholy juyce. Of Fruits Apples eſpecially are convenient as Appropriate all manner of waies, and other fleeting Fruits, and thoſe which are kept hanged up or dryed, as Prunes, Raiſons, Cherries and the like, and of harder things Freſh Nuts, and Almonds; of Plants thoſe that are temperate are allowed, as *Spinage, Lettice, Endive, Beets, both Bugloſſes* are extold in the firſt place as appropriate, onely *Colewort* is condemned, becauſe it is beleeved to produce *Melancholy*; the which notwithſtanding I judgeing by its taſt, do think if it be rightly prepared that it doth rather cauſe good Blood then other Plants, ſeeing it is tender and ſweet.

There muſt be ſpecial care had of the Drink, and we muſt allow ſomwhat to cuſtom, in thoſe that drink Water or Wine, ſeeing Weak wine can no waies hurt, nor Strong if it be diluted and moderately taken, but ſeeing it makes merry, it doth rather profit them, but if that we ſee that they become more ſad or more fierce by the uſe of it, we muſt temper it yet more, or wholly withdraw it; the ſame judgment muſt be of drink: and alſo the drinking of Whey is very much commended in theſe diſeaſes, becauſe it is laxative, as alſo Almond milk, which can no waies ſo much aſſail the Head as ſome have thought.

Sleep is very much commended, not ſo much becauſe it moiſtens, as they would have it, but becauſe it refreſheth the body and mind, and therefore if it do not invite them, it muſt be procured by giving Soporiferous things or application of Externals as ſhall be explained.

The Inordinate motions eſpacially of Mad Folks muſt be quelled with the ſame Soporiferous things, and they muſt be reſtrained with Chidings, Blows, Bonds, Guards, Priſons, for this alſo as experience teacheth, makes for the Cure of Mad Folks, whom Empericks beat with Rods and Scourges.

We muſt procure that natural Excretions be done decently, and if Nuns or Virgins do rage with a turgid matter by reaſon of the retention of their Seed, if they marry they are cured.

Affections of the mind in the firſt place muſt be removed from them by Arguments eſpecially when they proceed from no manifeſt cauſe, as hath been ſaid in the preturbation of Mind; and if they pretend falſe cauſes, as one the Greatneſs of his Noſe, or another Plenty of of Serpents in his body, that by ſatisfying of them this Opinion conceaved may be taken away, they muſt ingeniouſly be deceived and made believe that theſe are cut off or purged away, by ſhewing ſome ſuch like thing privately conveighed, or by ſome other art: they muſt be recreated alſo with pleaſant things which muſt be offered to their Senſes, and with thoſe things which we ſee them chiefly delighted with, with which notwithſtanding for the moſt part they are not moved; or if they be altogether mad they no waies underſtanding nor apprehending them, do neglect and ſleight them and are the rather more offended by them.

The other Symptoms which betide the Melancholick and Mad if they be too urgent they muſt be corrected as ſhall be explained in their particular chapters, amongſt which Watchings alſo are corrected with thoſe things which we have ſaid muſt be applied to the Head and by Lotions of the Feet, and if they be very troubleſome by giving things that cauſe reſt expreſt in Watchings, and every where in this Book, a Pain of the Stomach, Belly, Womb, a diſtention of the Hypochondries are corrected by Unctions, Fomentations of the Belly, and other things as ſhal be taught in their places, and if any thing be given by the mouth upon that account, muſt alwaies mix with them, thoſe things which do reſiſt melancholly.

As if in plenty of Winds and bad digeſtion ſuch a pouder be preſcribed to be uſed after meat. Take *of the pouder* Diacydonides fine ſpeciebus *two drams, Aniſe ſeeds three drams, Coriander prepared two drams, Cinnamon three drams, Squinanth half a dram, Indian Leaf, Marjoram of each one ſcruple; flowers of Roſes, Bugloſs each half a dram; Pearl one dram,* make *a pouder,* add *Sugar the weight of them all.*

The Cure of a Phrenſie and baſtard Phrenſie from a hot diſtemper & Inflammation of the brain.

A Hot Diſtemper of the Brain if it cauſe a Raving and it be a true Phrenſie which ariſeth from an Inflammation and its membranes, and preſently invades with a Feaver it is a moſt dangerous and moſt acute Diſeaſe, which ſomtimes is terminated on the third day; but if they be leſs fierce, and Rave with Laughter, theſe things afford us great hopes of recovery; but if it be a baſtard Phrenſie and the brain be not yet inflamed, but is only heated by a humor or vapor, as it commonly comes to paſs, and it follow a hot Diſeaſe, chiefly a Feaver, we muſt foretel according to the condition of the Diſeaſe; for if this be in the fits of Intermitting Feavers either in the beginning or ſtate, as this is wont to be common with Children the Fever remits again together with the Fit; but if this happen in continual Feavers about the ſtate, it can in no wiſe be free from danger, the brain conſenting then with the heart that is oppreſt, where yet if nature overcome the Diſeaſe, the Feaver declining, the Raving alſo ceaſeth; alſo in Peſtilential Feavers according to the nature of the Diſeaſe which is Curable or Killing, the Raving becomes Deadly or no waies ſuch yet it denotes no good if it ſupervene, and then if the pulſe alſo remit, and ſpots break forth, Death is at hand; in the Worms of Children alſo it is judged according to the nature of the Feaver and oftentimes foretels Convulſions to come upon it, otherwiſe without any hurt 'tis taken away with the Feaver.

The intention of Curing in a true Phrenſie is this, that firſt of all with things evacuating we revell and derive from the Head, the bloody humor heating or inflaming the Brain, and that chiefly by taking away of Blood and alſo by Medicines that looſen the Belly, next that by things altering uſed inwardly and outwardly, and by a courſe of diet we correct the heat chiefly in the Head, alſo in the Liver, Heart, which alſo as the whol body have grown hot by reaſon of the Feaver and towards the end diſcuſs the remaining matter, in the interim alſo having reſpect unto the Symptoms, if there be any beſides theſe; the which alſo are adminiſtred in a baſtard Phrenſie but guided by the nature of the Diſeaſe accompanying, from whence it proceeds, in which alſo let it be your intention to hinder by this means the aſcent of Vapors, and to revell thoſe already carried up.

Drawing of Blood for Revulſion ſake ought to be ſuddenly

ſuddenly done in a true Phrenſie, & that largely or often repeated in a Vein of the Arme moſt apparent, eſpecially the Shoulder Vein. But the Vein muſt not be opened with too large an orifice as the French are wont to cut with their Lancets; leſt whiles they are unruly the flux of Blood cannot wel be ſtopt. In a baſtard Phrenſie likewiſe if we ſee a great afflux of humors carried to the Head, by the greatneſs of the Raving and the Veins of the Eyes ſwelling, unleſs by reaſon of the Feaver becauſe it is in its ſtate, or becauſe laſting long, or by its malignity it hath overthrown the ſtrength, we be compeld to forbear it, and nothing elſe hinder. A vein alſo muſt be opened, although it hath been alreaddy open'd in reſpect of the Feaver.

Alſo for Derivation in a Phrenſie alwaies, and ſomtimes in a baſtard Phrenſie, if the Raving be vehement whence we ſuſpect the vehement heat doth raiſe an afflux of humors, even at that time when we are forbid to open ſome general vein, ſomtimes being forced, we ought to open a particular one, by which there may not be ſo great an effuſion of Blood, although it be in the ſtate, for fear leſt the falſe Phrenſie ſhould be changed into a true one: of which kind chiefly is the Vein under the Tongue, which being opened doth oftentimes very much help in Ravings: upon which account it is convenient alſo to open a Vein *in* the Forehead, when great neceſſity urgeth, and we are not compeld to dilate it, by girting the Neck with a Swath, by which the blood is too much forced upwards; and to open the Veins of the Noſtrils with Briſtles or other rough things by pricking and rubbing them; or to ſuck out the Blood applying Leeches behind the Ears, to the Forehead, Noſtrils, Fundament.

Scarification alſo doth good with Cupping-Glaſſes applied for Revulſion in both Species of Raving; and when it is not fit to open a Vein in a Baſtard Phrenſie, then alſo inſtead of that it ſhall be applied for revulſion ſake to the Shoulder-blades, Shoulders, Arms; which I am wont to do with good ſucceſs inſtead of Derivation on the ſides of the Neck about the jugular Veins, others alſo approve of it done on the griſly part of the Ears: for which Scarification if they will not endure it, Cupping-Glaſſes only may be uſed.

We ought alſo by Frictions of the extream parts to revel, and by making Ligatures alſo in thoſe places, to reſtrain the too much motion to the upper parts, the which alſo may be performed by Lotions of the Feet which we ſhall by and by preſcribe, for the cauſing of ſleep.

If they admit not of Clyſters they muſt be caſt in by force, and that they may keep them, their Fundament muſt be ſtopt with a Cloth, for they revel much by ſtimulating, and correct the heat of the Body by altering, and evacuating the Cholerick Excrements, upon which account, both by reaſon of the Raving, and the Feavers accompanying it, they are convenient in both Species of a Phrenſie: the which ought to be caſt in before bleeding, and afterwards muſt oftentimes be repeated, many of which have been preſcribed in Feavers.

For example ſake we propoſe theſe only: Take *of Caſſia newly drawn ſix drams, Red or courſe Sugar one ounce, Oyl of Violets three ounces, juyce of Beets or Mercury one ounce, Salt one dram, with the Decoction of the four Emollient herbs*, Make a Clyſter.

A more Compound one is made thus: Take *of the Herb Mallows, Marſh-mallows with the Roots, Pellitory of the Wall, Beets, Mercury, Lettice, Violets of each one handful. Whol Barley one pugil, Guord ſeeds half an ounce, Prunes ſix*: Make a Decoction. In a fit quantity diſſolve *Honey of Violets, Red Sugar, of each one ounce; Catholicon, Caſſia, of each half an ounce; juyce of Beets* or *Mercury, of each one ounce; Oyl of violets three ounces, a little Salt*; Make a Clyſter. *Laxatives* and ſomwhat *Stimulating* may be given, eſpecially in thoſe that are bound to looſen the Belly, chiefly when they will not admit of Clyſters or do not keep them. But we muſt have a care of purgers that heat the Body, in which thing Empiricks knowing nothing elſe but to purge, are oftentimes grievouſly faulty.

Therefore a day after a Vein hath been open'd ſuch a ſolutive Medicine may be given: Take *of the ſimple Syrup of Roſes ſolutive two ounces, water of Violets, Lettice, Bugloſs as much as is ſufficient*, to dilute it, and give it.

Or this, Take *of the juce of Roſes one ounce and an half, Sugar ſix drams, diſſolved in Roſe water*; Boyl it gently, ſtrain it and give it.

Otherwiſe after this manner: Take *of Syrup of Roſes ſolutive, Violets, of each one ounce*, with *Meſues* Decoction of Fruits, give it.

If at any time we muſt paſs to ſtronger Medicines, it may be done thus: Take *of Rhubarb four ſcruples*, infuſe it in *Water of Roſes and Violets*, ſtrain it, add *Syrup of Roſes ſolutive one ounce or more*, give it.

Or, Take *of Sena* (whoſe juyce is not unlike *the juyce of Rhubarb*) *two drams* or *three, Polypody half an ounce, ſomwhat ſharp Prunes ſix*: Boyl them, to the ſtrained Liquor add, *Syrup of Roſes ſolutive, Violets, of each half an ounce*: Make a Potion.

Things altering are given both by reaſon of the Feaver accompanying, and becauſe of the hot diſtemper of the head, in a form chiefly acceptable to them, eſpecially of drink, becauſe they are very thirſty, for they do not willingly take things Medicinal, with which alſo we ought to prepare the Cholerick Humor, if there be any, before we purge it, you meet with various compoſitions of theſe in Feavers therefore here only a few examples are propoſed.

In their Broths are boyled, *Sorrel, Lettice, Bugloſs*, and their *Waters* are mixed with them, as alſo *the juyce of Citron* and *Roſe Vinegar*.

Inſtead of Beer, we muſt mix with the boyled water which he drinks, *Syrup of Currans, Pomegranates, Lemmons, Wine of Pomegranates or other Acid juyces*.

Or you may give by courſe, Juleps in a fit quantity by themſelves, or mixt with Beer after this manner: Take *of Syrup or Wine of Pomegranates, of Barberries, of each two ounces, Violets one ounce, of Poppy* (by reaſon of watchings) *half an ounce, water of Lettice, Sorrel, Roſes, Bugloſs, of each four times the quantity*, let him drink it. In place of Syrups, Juyces may be uſed.

A Conſerve made fot the ſame uſe to be often taken, As, Take *of the Conſerve of the four Cordial flowers of each one ounce*; *Coleworts, Lettice, fleſh of Citrons condite of each ſix drams*; *ſeeds of Sorrel, Endive, Purſlane, of each half a dram. Pouder of Diamargaritum frigidum one ſcruple, Syrup of Pomegranates* or *Currans*: Make an Electuary.

Things cold and ſomwhat aſtringent muſt be applied to the Head at the beginning preſently, whiles the Humor flows, or Vapors aſcend, the which do repel them.

Oxyrhodines are fit for this uſe, prepared thus: Take *of water of Roſes, Plantane, of each two ounces; Oyl of Roſes two ounces, Vinegar of Roſes one ounce.* Mix them.

Or thus, Take *of the Oyl of Roſes Omphacine one ounce and an half*, Unguentum Populeum, *Vinegar, of each half an ounce, the white of an Egg*, beat them together and apply them to the Forehead.

But a repelling Decoction may be made thus, Take *of the Leaves of Sallow, Lettice, Plantane, of each one handful; Flowers of Roſes two pugils, Violets one pugil, ſeeds of Plantane, Myrtle, of each two drams*; boyl them in *iron'd water*.

Afterwards Coolers and Moiſtners are applied, with which we mix things cauſing reſt

In this form, Take *of the juyces of Lettice, Nightſhade, of each two ounces*; *Plantane one ounce*, let cloaths dipt in them be applied.

In Summer time we prepare them of Waters, Take *of the waters of Roſes, Nightſhade, Lettice, Water-lillies of each two ounces*; *Plantane one ounce*, let cloaths dipt in them be applied.

A Decoction for Irrigation may be made thus, Take *of the Leaves of Violets, Lettice, Nightſhade, Water-lilles, Houſleek, Purſlane of each one handful*; *flowers of Violets, Water-lillies, Borrage, of each one pugil*; *ſeeds of Lettice, Poppy of each two drams*; *of Henbane one dram*; make a Decoction for an Irrigation.

Afterwards let the Head be anointed with the following Unguent, Take *Oyl of Violets Water-lillies, of each one ounce*; *of Roſes ſix drams, of Poppy, Mandrake, each half an ounce*; Unguentum Populeum *one ounce*, (we add no Camphire, becauſe it cauſeth watchings) mix them with a little white Wax, for an Oyntment.

Then we may ſtrew Pouders on the place anointed, after this manner, Take *of the flowers of Roſes, Violets, Water-lillies, Lettice ſeed, of each two drams*; *of white and black Poppy of each one dram*; *red Saunders, Coriander, of each half a dram*: mix them.

When the raving begins to abate, we add certain diſcuſſive things to the forementioned forms, ſuch as have been preſcribed in a Melancholly humor, cauſing Melancholly and Madneſs, but ſomwhat more temperate: and then eſpecially we are content with Anointings adding Oyl in which Mother of Time and Chamomel have been boyled: and afterwards Sinapizing the head as they cal it.

As with the following Pouder which alſo ſtrengthens the Brain. Take *of Coriander ſeeds two drams, flowers of Roſes, Chamomel, Lavender, Roſemary of each one dram*; *Orrice root half a dram, of all the* Saunders *one dram*; make a Pouder.

Beſides theſe things, when the raving is at the higheſt, there is a ſingular and approved Remedy, made of the Fleſh and Blood of Animals, being applied to the Crown of the Head whiles they are yet hot, which being roaſted as it were with exceſſive heat of the Head, when they are laid aſide, do ſeem to ſend forth a certain vapor, and I have often obſerved that they alone almoſt have helped: which whether they do it by diſcuſſing as ſome would have it, or by ſtopping the force of the blood, I wil not here any longer diſpute, this I know, as ſhal be ſaid in the Hæmorrhages that theſe do wonderfully ſtop the blood flowing out of a wound, but for this uſe the following things are for the moſt part made choice.

Certain whol Animals cut through the back, and preſently unboweld, as a Lamb, a Puppy-dog, a young Pigeon or Chicken, or the bloudy parts of them, as the Lungs of a Ram Gelt, of a Lamb, or the Livers, or alſo other fleſhy parts, hot from the Creature new killed, as alſo other things muſt be applied, or if they be cooled, they muſt be heated again.

For the hearts ſake, ſtrengthening Epithems are applied to the region of it, by reaſon of its double diſeaſe, both of a Fever and becauſe of its Weakneſs, which alſo may be bound to the Pulſes in a cloth, ſuch as have been propoſed in Feavers and formerly in Melancholly.

And a more ſimple one may be made thus. Take *of Roſe water four ounces, of Violets, Bugloſs, of each two ounces*; *Vinegar half an ounce, of all the Saunders each one dram*; *Saffron half a ſcruple, Camphire five grains*; mix them.

For the ſame cauſe alſo regard is had to the Liver, and Epithems are applied to that.

The Breaſt alſo is anointed with cold relaxing Oyls as Oyls of Violets.

And the Cods are cooled with things working actually and potentially.

The Thighes and Arms of the whol body are waſhed for coolneſs ſake, and that they may the eaſier ſleep, with the Decoction of the Plants of the Vine, Violets, Lettice, Poppy and the like.

A Courſe of diet is to be ordered, not ſo much to preſerve Strength, as to help ſomwhat by Alteration.

Let the Air incline to cold, but whether they ought to be kept in Darkneſs or Light, that they may rave the leſs, ſome do very much trouble themſelves, ſeeing falſe apparitions do appear to them, as wel in the light as darkneſs, but it is better that they be kept in a place ſomwhat obſcure.

Their meat ought to be cooling and moiſtning, ſuch as is convenient for the Feveriſh, ſeaſon'd with herbs and other cool things, as Lettice, Endive and the like, alſo with the juyce of unripe Grapes, and Vinegar, and other cold juyces, and ſeeing theſe Delirous know not what they do, and oftentimes do not devour their meat only, but alſo other abominable things, we muſt not humor them, but when the Diet ought to be Slender we muſt withdraw it, and they muſt be fed with Barley, Prunes, and other lighter things.

Let their Drink whiles they rage be Water, taken of it ſelf, or firſt prepared with boyling, to which we may mix Syrups, as was ſaid before, for preparation and alteration ſake.

Thoſe things which concern *ſleep, motion, and the affects of the mind*, ſhall be explained now in the Symptoms.

For *the ſymptoms* which happens beſides *Raving* are others alſo ſupervenient to them, both by reaſon of *the diſeaſe of the head* and of *the Fever accompanying*, to which we ought to have reſpect.

Watchings by reaſon of the exceſſive heat of the brain, are common and hurtful to them, which in general are corrected with the ſame *Remedies* that reſiſt the diſeaſe, as hath been ſaid, ſeeing they cool and moiſten, eſpecially the external ones, to which upon that account are added *things ſoporiferous*, and privately for their ſake *ſoporiferous medicines* are given *mix with Cordials* as ſhal be ſaid in its place.

Inordinate motions do ſo diſturb them by reaſon of their depraved imagination that they endeavor by all force to riſe out of the bed, and to cloath themſelves, and if they be not reſtrained, to make an eſcape, whence oftentimes being void of reaſon, they fall from a high place, and kil themſelves; which unquietneſs is likewiſe amended by *things* given to *cauſe ſleep* ſeeing the mind being at reſt the body muſt needs reſt alſo: and that they may be reſtrained, which is very hard, ſeeing madneſs makes them ſtrong, they are oftentimes bound in *bands*, the which notwithſtanding ſomtimes when they are angry upon that account, and more fierce, we ought to looſe them, and give them way a little, yet uſing

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great caution that they hurt not themselves nor others.

A Suppression of the Urin is a Symptom peculiar to them, whenas being so intent upon their imaginations, they feel not the provocation of the Urin, and therefore care not to make it, by the retaining of which the Bladder being too much filled and distended afterwards voids the water with a great deal of difficulty; the which we must cure, *by seasonably admonishing them, and shewing the Chamber-pot* and by applying *external Remedies*, of which we wil treat of in the retention of Urine.

The dryness, blackness of the Tongue which denote the highest burning of *a Feaver* is corrected, as shal be explained in its place.

Thirst doth very much torment them by reason of their heat, it is corrected by *altering things cold and moist*, especially given in their *Drink*, as hath been already said, and shall be said in thirst in general.

Their weakness and overthrow of strength known by the Pulse, seeing their unquietness otherwise stirring them up, doth seem to add strength to them, as hath been said, is repaired *by a course of Diet and cordiall medicines*, used *inwardly and outwardly*, as also with them already mentioned.

The Cure of Folly from an evil conformation and distemper.

To undertake to Cure *Folly bred* in a man *from his birth* by *an evil conformation*, seeing it is impossible to fashion otherwise the parts once formed, were to attempt to wash and make a Blackmore white; as also it is impossible to change any thing, if this happen from *a perverse temperament* the which notwithstanding is sometimes amended, by *the change of age*, by *Gelding*, as hath been said in *madness*, where also *custom* may do much, by which it came to pass that *Cimon* for love of *Iphigenia*, when he knew his foolish behaviour did displease her, by little and little changing of them, *from a Fool* became *a wise man*, as this whether true or fabulous is agreeable to reason.

The Cure of madness from putifaction, a Speck, Worms in the brain.

If *madness* be sprung from *Putrefaction*, or *a Speck*, or *Worms* as they would have it, by reason of vapors sent from thence to the brain, we can scarcely fit a Cure for these, which are almost hid from us, yet if that Cure which was described in *madness* arising from *a melancholly humor* be also applied here, it wil be no fault; but if the malady be grievous 'tis incurable.

CHAP. IV:

Of a Defatigation of the mind.

The Kinds.

WE call that *a Defatigation of the mind* when the *internal senses* are exercised *more*, or *longer* than 'tis convenient; or when they rest *not at the time prescribed them*, by *sleep*, which is the rest of the mind, or *not sufficiently* as it comes to pass *when they sleep not, in too much Watchings*, or *when they sleep* but *unquietly, by reason of grievous dreams*: the which both in the sound and sick do sometimes cause weakness, create trouble, and increase diseases.

Watchings.

Too much and preternatural Watchings are, when they *sleep not at all* for some daies, months, or *not sufficiently* fill up the term of seven or eight hours or more according to the custom of natures, seeing Children sleep more than they wake. These whether they *be Symptoms of Diseases* or happen *without them*, do at last bring hurt, seeing they heat the spirits by their too much use and exagitation, whence it happens that the humors also are set on fire, especially the hot ones, and the same are at length consumed.

And hence must needs follow at last, *a weakness of some functions* of the body, as the *animal spirits* being wasted, there is some defect of *the internal senses*, and by consequence of *the external* also, chiefly of *the sight*, seeing for the exercise of that there is need of so great a quantity of spirits; and then by a certain consecution there being a dissipation made of *the vital spirits* also, there follows *a languishing* of the whol *body*, and *the natural* spirits being offended too, *the natural actions* are hurt, and chiefly *concoction*, not because sleep as they think doth digest, but because *concoction* that it may be rightly performed, wanting more plentiful spirits and heat, for want of them is for the most part offended sooner then the other actions.

And also *immoderate watchings* do bring *troubles and pains to certain parts*; and that because not only *the spirits* are heated, but *the humors* also by infection from them, whence *the spirits and blood* by too much *watching* growing hot first of all in *the Head, a pain of the Head, redness of the Eyes*, and *hot tears* flowing thither, an *itching* doth befall *the watchful* that they are often forced to rub their Eyes; and if they last *long* and the mass of blood be inflamed, *diary Feavers* are caused; and if this Symptom urge in other *Feavers* the heat being increased, the symptoms of *the Feavers* grow stronger *Choler*. Also in the cholerick growing hot for this reason through too much *watching* and poured *into the Stomach* and boyling there, breeds *gnawings of the Stomach*, and *other accidents* of it, and *by consent* with that, *pains of the Head, and Megrims*.

Dreams.

Preternatural Dreams are, when *in sleep* the *external senses* only do seem to rest, but the *internal* do not only lightly exercise themselves, as is in natural Dreams, but *immoderatly* and with *vehemency and labor* as if they were waking, although exercise themselves depravedly, and do also exagitate and dissipate the spirits, that *being rouzed up* they seem to be rather *wearied* than *refreshed*.

Immoderate Dreams that make the body *weary and weak*, are those which besides the custom do last longer, almost all night; but this happens *to some naturally* that Dreams do then begin first, when the vapors which caused a sound sleep, are now discust, after the first sleep as they call it, *but on others* as labouring men tired with labor, and sleping presently after meat, *sleep* so steals on them *by reason of the plenty of vapors* that they have no *dreams* at all, or if they have some wandring, they no waies remember them; the which also though it be natural too, yet that *Country fellow* not thinking it convenient, that he could rehearse no *Dreams* to his Companions amidst their Cups, for this reason takes counsel of the Physitian, and receiving from him *a strong purging medicine* sleeping upon it dreamt that he shit a bed, afterwards awaking he found in very deed, that he had dreamed, and that a true and fatal one.

Grievous dreams are which do not only lightly exercise the mind, as natural ones (which therefore seeing they are not very much imprinted on the Brain) they do easily slip out of the memory either wholly or

in part, that being wakend they can recite little of them) but do very much exagitate it, and do no leſs affect the ſenſes then if thoſe things did truely fal out, which appear to them in their ſleep, in ſo much that oftentimes being ſtrucken with fear they ſuddainly ſtart up, or if nevertheleſs they continve in their ſleep, they are altogether unquiet, and toſs their Body variouſly in their ſleep, Sweat, and ſomtimes Talk, Prate much, Cry, Laugh, call out, Nay and ſleeping ſtill, nevertheleſs riſe out of their Bed, and as *Galen* writes it hath befallen himſelf, they walk and ſurvey many places, concerning which the common people perſwade themſelves many ſuperſtitious and old wives tales, how they can climbe without danger, if they be not hindred, nor wakend being called by their own name, thoſe difficult places, otherwiſe impoſſible for the wakening to do: many grievous dreams of which nature, tis well known to all, are dayly objected, both to the ſick and otherwiſe ſound.

But they are ſuch, if horrible things are preſented to their minds whiles they are a ſleep, with which they are either vehemently frighted, as when they dream that they are in danger by ſome violence offered, a fal from on high, of Fire, Water, or by reaſon of ſome great offence, or for the loſs of ſome grateful thing repreſented to them, they are Angry, Sad, and Greive.

Alſo Portentous Prognoſticating Dreams, eſpecially thoſe that portend any evil do very much aſtoniſh, and though they preſage ſome good, nevertheleſs they move a little, the which ſo many ſacred and prophane Hiſtories do teſtefie, are ſent to men, from a good and evil Spirit,

The Cauſes.

The Cauſe both of watchings and dreams, one is ſupernatural depending on God or the Devil, another natural, from cuſtome, which is a ſecond nature, or it lies in the Head and it is a too great Commotion or Perturbation of the Animal Spirits, or a hot diſtemper of the Brain.

The great and good God as he makes known his wil to us watching, and puts it into our minds, ſo alſo he will ſomtimes admoniſh us by Dreams of things to come or things preſent or paſt; ſomtimes by ſending of viſions unknown by themſelves. Yet the interpretation of which he graunted to ſome, as to *Joſeph*, *Daniel*: but at other times he hath ſet before our Eyes as it were in Dreams the thing it ſelf as it is, *as to* Pharaoh *the Dearneſs of proviſion to come, to* Daniel *the Monarchies to come*, Julius Cæſars *preſent danger to his Wife, the paſt Death of* Ceyres *the Husband, to his Wife* Alcyone.

The preternatural cauſe of Dreams.

And the Devil alſo by Gods permiſſion as he doth often dilude the ſleeping with falſe Images and Apparitions of things, ſo alſo he troubles men in their Dreams with true ones ſometimes, that ſignifies ſomething certain, if he can hurt them, ſeeing otherwiſe he is a lyar.

Cuſtome is the cauſe of watchings and Dreams.

Cuſtome oftentimes makes men to be raiſed at a certain hour of the Night and to watch a long while, as we have oftentimes already taught that Nature being accuſtomed, doth obſerve her times in excretions alſo, and others of her Natural Operations; which is very familiar with old folks in watchings, who though they be Prone to Sleep, and preſently betake themſelves to Bed; yet being rouſed either about midnight or ſooner or later, can Sleep no more. And after this is wont to be accuſtomary to them, care and thought in the interim joyning themſelves, by which whiles they ſearch into, and diſpoſe of divers things, they are awakend more. Alſo ſome dreams come to a habit from a certain Cuſtome that afterwards for a long time they dream dreams of the ſame kind, and do not only conceive them in their minde, but by words and deeds expreſs them in their ſleep.

The too much commotion or perturbation of the Animal Spirits, are the cauſe of preternatural watchings and dreams, which come to paſs the internal ſenſes being too much affected, for then the Spirits being ſtirred. becauſe they can not reſt, they can no waies ſleep but watch, or if they do ſleep, either they are vexed nevertheleſs with too much Dreams or thoſe more grievous; which impulſion of the internal ſenſes either befals them by accident by reaſon of the external ſenſes, or by it ſelf. For the external ſenſes being very much moved by their proper objects, do move alſo the internal and ſuffer them not to be quiet, or if they be quiet, nevertheleſs they diſturb and force them: as the ſight moved by too much light, the hearing by a great noiſe turnes away ſleep, and makes the ſleepers unquiet, or rouzeth them up, becauſe ſilence and darkneſs are rather required to ſleep: the touch eſpecially affected with pain and trouble doth cauſe watchings. Upon which account in Diſeaſes that torment with pain they are alſo troubled with watchings, and in dreams they repreſent the pain to them aſleep; and thoſe that are troubled with a pain at the Heart the ſtomach being to ful, they ſleep unquietly; the which happens alſo to them who ſuffer any other trouble in Diſeaſes, as to thoſe that are very thirſty, who watch by reaſon of the thirſt, or if theſe kind of people do ſleep, they are tormented alſo in their dreams with a deſire to drink; as it betides them alſo who are vext with a difficulty of breathing, in divers Diſeaſes of the Breaſt, and in a Dropſie, that they cannot ſleep, or if they do ſleep being ſtraitend with danger of ſuffocation, they have alſo ſuch Dreams.

A commotion of the Animal Spirits is the cauſe of watchings.

The ſenſes alſo being too much moved by themſelves, by a vehement intention of the minde upon ſome things, the ſpirits being ſtirred, at it comes to paſs in vehement and laſting paſſions of the Minde, *viz.* in Joy, Anger, Fear, Sadneſs, Love, they are afflicted with too much watchings, or if they do ſleep, nevertheleſs they are exagitated in Dreams with their affections; and alſo ſo many Species and Images of things, ariſing from the ſtudies of divers Sciences, Arts, and human actions, being apprehended and imprinted on the Brain, do not only exerciſe the Memory of the waking ſo that they ſleep leſs, but being obverſant to them ſleeping and moving the Spirits, they ſpring forth again in their dreams. And thoſe things which we met withal either the ſame day, or the precedent daies or a long while before, do repreſent themſelves either in the ſame form that they were in or from a mixture of them diverſe forms ſpringing up wonderful apparitions ofter themſelves to us, which either have not happend, or are not to be found in Nature. And hence it comes to paſs that oftentimes ſuch Dreams by reaſon of their enormity, are thought portentous, the Cauſe of which notwithſtanding is Natural, *viz*, this commixture of formes (as if one hath ſeen in the day time a fine Horſe, and a Man, he may Dream that he ſees a Centaure) and the common People by Reaſon of the diverſity of dreams, which tis no wonder that they vary ſo according

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ding to ſo many conceptions of the Mind, do perſwade themſelves by a great error that every one doth portend ſomthing.

Alſo the manner of lying by which the Animal ſpirits being moved, are leſs quiet in their ſeats, but do eaſier change their place, make much for the cauſing of more Turbulent Dreams, (as we ſee this may be done in Members retained a long while in a non natural Scituation, that ſuffer a numneſs by reaſon of the Spirits hindred, and in a Vertigo from a wheeling of the Body by reaſon of the Spirits running up and down,) as we ſee it happens by lying one the Back eſpecially the Head bending downwards, the Spirits then from the Head penetrating more the Spinal Marrow, and ſo cauſing motion and ſenſe, that though they be not wakend, yet nevertheleſs they are more exagitated in their Dreams.

A Perturbation of the Animal Spirits, a Cauſe of Dreams.

Alſo *a Perturbation of the Spirits of the Brain*, from *Impure*, *Filthy*, *Melancholick Vapors* or *Humors*, cauſeth *Grievous and Turbulent Dreams, and the like apparitions appearing in Sleep*; and as *pleaſant and merry Dreams* do ſhew forth *a healthful Conſtitution*, ſo theſe *ſad and horrid Dreams* for the moſt part ſhew *a Melancholick Conſtitution* and oftentimes *Diſeaſes to come*; and in Diſeaſes of this Nature, generated of Melancholly, and a Malignat matter, together with other accidents of the Brain and Dotages they do vehemently Exagitate a man, and alſo cauſe watchings, but *Dioſcorides* alſo writes that terrible Dreams are cauſed from certain things taken, as if *Beans*, *Lentils*, *Fitches* be eaten, and alſo if the ſeeds of Bind weed, and Venemous Tree Trefoile be taken, doubtleſs the Spirits being wont to be troubled by their ſtrength, they are cauſe Dreams.

A hot Diſtemper of the Brain is the cauſe of watchings and Dreams.

A hot Diſtemper of the Brain, alſo *heating the Spirits* becauſe it makes them unquiet, may be *the Cauſe both of Watchings and Preternatural Dreams*, which ſomtimes happens from hot Vapors proceeding from things taken, as *hot Meats* and eſpecially *Wine* which though it cauſe ſleep by its Narcotickneſs, yet it breeds unquiet Dreams; a hot Evaporation from Humors or Excrements, or the Bloody Humor it ſelf inflaming the Brain as they do produce a pain of the Head, ſo alſo Raving, Watchings, and Grievous Turbulent Dreams, and ſuch as reſemble the Nature of the Humor, oftentimes in Feavers, in a Phrenſie, and other hot Diſeaſes.

The Cure.

The Cure of Dreams from a preternatural Cauſe.

In the Cure we muſt reſpect the Cauſe and the Symptome, but we have ſaid the Cauſe of watchings and Dreams was from God, the Devil, Cuſtome, an Agitation and Perturbation of the Spirits and heat of the Brain.

The Dreams ſent by God becauſe they are good, and nothing proceeds from God but what is good, or tends to a good end, we cannot, nor ought not to change; the tricks of the Devil are turnd away by Prayers, Faſting, amendment of life and a ſtedfaſt Faith.

The Cure of watchings and Dreams from Cuſtome.

Cuſtome as a ſecond Nature is not eaſily changed, but by a contrary Cuſtome; wherefore they that are wont to be raiſed at a certain hour of night, let them go to bed later or ſom: other way let them change this Cuſtome, and in time of ſleep, as much as they can let them abſtain from deep thoughts, alſo if Dreams do ſo accuſtomarily vex men, that they are unquiet, Skip, Talk, Walk, then they are ſomtimes to be wakend by frighting, for hence it comes to paſs, that that fear repeated, at length offering it ſelf to them in their Dreams, doth rouſe them up of their own accord, and by degrees turnes them from this evil Cuſtome. As one that was wont to walk in the night, being ſomtimes beaten with rods at length left off this Cuſtome; and that Cobler who becauſe he thought in his Dreams that he was ſowing, and with opening his Arms, as they are wont to do drawing their thred, he ſmote his companion by him, being oftentimes ſoundly kickt again by the ſame man feigning himſelf to Dream that he was riding, at laſt he was freed from this Error.

But if they be compeld to watch, or grieved with Dreams from the too great plenty of Spirits, the Cauſes which exagitate them, muſt firſt be turned away as if ſleep be hindered by too much light or noiſe, or they ſleep unquietly, theſe things muſt be declined, by inducing of darkneſs and reſt: if affects of the Minde do cauſe it, as hath been ſaid in that Species of Alienation of Minde, they muſt be corrected, and thoſe things be given, which can bring gladneſs, and alſo procure reſt, as Wine; but eſpecially if too great an intention upon ſome thing and Ratiocination made on it, do hinder ſleep, and the minde cannot be drawn from it to take reſt, ſleep is the eaſier procured after this manner. The minde being called away from the former by the Meditation of another thing, as we do obſerve thoſe that watch a nights, if they be devoutly very intent on their Prayers to God, forgetting other cares, they do ſooner fall a ſleep: but if ſome trouble make men watchful or diſturbe them in their ſleep, as thirſt, then ſalt things which do cauſe that, muſt be omitted eſpecially at Supper, and Sleep muſt be expected, which ſupervenient is wont to quench thirſt, if it perſevere, it muſt be amended as ſhall be ſaid in its place ſo alſo if they ſleep unquietly by reaſon of fulneſs, a ſparing and ſober Supper is wont to correct this fault, and that chiefly if they ſleep not preſently after the taking of meat; if a difficulty of breathing contracted by their lying down do ſo vex them that they cannot ſleep, they muſt be ſo placed upright that they may breath free. And yet the Body may reſt, as ſhall be explained in a *Dyſpnœa* as alſo if by lying on the Back they are troubled with grievous Dreams if they ſleep on their ſide with their Head more lift up, they ſhall be leſs oppreſſed. If alſo a great pain in ſome Diſeaſe do hinder ſleep, as this is moſt frequent, and that cannot be mitigated by any other means, by ſoporiferous medicines we ſhall with the ſame labor procure ſleep and mitigate pain, becauſe they induce a Stupidity: rather giving them inwardly, if great neceſſity do urge, becauſe ſo they do work more powerfully; as with *Wine*, or if we muſt uſe ſtronger, *Syrup of Poppy* and other *Opiates*, or we muſt uſe *Vnguents* applied to the Temples and Forehead ſuch as *Populeum*, and *Lotions of the Feet* which for the procuring of ſleep alſo can do much, as in *Hypnoticks* divers of that ſort ſhall be explained.

The Cure of Dreams from a Perturbation of the Spirits.

If watchings or Dreams proceed from a perturbation of the Spirits, the Cauſe alſo muſt be taken away, which if it proceed from Meat or Medicine, we muſt have a care of making uſe of any Pulſe, and other things that Evaporate upwards; if this happen from *Vapors* or *Humors* by diligently ſearching out, what Excrement

sends forth its vapors upwards, what humor offends, and being intent upon the emptying of these, if there be a plenitude, by Bleeding, if a Cacochymie Purging, by giving those things also which do repress vapors, especially after supper, and chiefly by the Diet at Supper being moderate, taking care that the like be not ingendred, nor ascend, we shall compleat the scope of Curing.

If a distemper of the brain cause *Watchings and Dreams*, and there is a certain *hot evaporation* from *meat* or chiefly from *Wine* as we have said, *cold things* being taken *at the end of meals* as was said of *Vinegar* and other things which do actually refrigerate, will correct it, upon which account, some if they drink *cold Water* when they go to sleep, their rest is the sweeter: but if this happen *in diseases*, then those things which are convenient *for curing the disease*, seeing they *are cold* wil also do good here, especially if soporiferous and narcotick be mixt with those things which are applied inwardly and outwardly as hath been explained in *Ravings* and *hot Headaches*.

CHAP. V.

Of the hurt of Feeling.

The Kinds,

Stupidity. THe Sense *of Feeling* is first hurt, when it it is abolisht, and it is called *a Stupidity* or *Narce*, not for that reason, as when the functions of the mind are abolisht, we call it *a Stupidity* or *stupidness of mind*; or when from *the immoderate passion of the mind* we say they are astonisht, so that oftentimes though they be wounded yet they feel it not, till they come to themselves again, but here it is properly called *Stupidity*, when a part is so deprived of the sense of feeling, with which it was endued, that it can no longer perceive the qualities of the thing objected, and that either *altogether not* perceiving as if it were dead, or otherwise very *impairedly* as if, as it is commonly said, it were asleep.

Otherwise *a stupidity is general*, at once happenning to many parts of the body, which most commonly happens in *a Palsey motion being abolisht* together with *sense*, in which the *palsied member*, either is wholly stupid or only in part; sometimes *a stupidity* seizeth first before motion is abolisht, and goes before *a Palsey* and at last ends it; that *general stupidity* is seldom found *alone* yet *Fernelius* testifies that he saw the like happen from Drunkenness, in which the body was all over stupid.

A particular stupidity happens only to certain parts, not only to those affected with *a particular Palsey* but that sometimes is wont to happen *to parts that are not palsied*, sometimes *in the Hands, Feet, Face*, as I had after an Epidemical disease *a stupidity* left me in part of my Hip for many years: and perhaps that may happen *intrinsecally in the Bladder and Fundament* not only when they are palsied, but also only the sense of feeling being abolisht, they lose their goad, and are not solicited to excretion to perform it rightly, and it may be the cause why some are sometimes so slow to stool and pisse, as shal be said there: but also in those *parts endued with sense of feeling, which are no waies moved with voluntary motion*, and therefore cannot be palsied, as *the Skin, Membranes, inward bowels, Stomach, Guts*, this solitary Stupidity may happen, as wel as in others which are moved.

The sense of Feeling is depraved, not when it is so affected by its object, that there is a sad sensation, which they call *pain* and refer it to the sense of feeling depraved, but we because it then percieves its object such as it is, and as it offers it self, do think that *pain* is not to be refer'd to the depraved sense, but rather to the simple accidents amongst the symptoms, as we shal say in its place; but when it perceives falsly, and errs as it were, as the other senses do, when they think they See, Hear, Tast, those things which are no waies such as are represented; the feeling we say if it be thus affected, doth perceive depravedly.

A Formication.

Such is that sense which from the touch of any thing feels it not rightly but the part feels in it self somwhat else, as when they feel a certain *running up and done* through a part as it were of *Ants* whence the Modern have called this affect a *Formication*.

A false sense of heat & cold without and within.

Also *that other sence* when a member touched with Air or Water they depravedly feel it to be affected and perfused, as if they were *excessively cold* or *burning hot*.

To which also is added a new Species more rare, first of all somtimes observed by me that is *a troublesome sense of the Air or Water*, Hot or Cold, about the Gullet and Stomach chiefly manifesting it self in swallowing; a symptom somtimes befalling the *Paralitical* or *Convulsed* with difficulty of Swallowing, Speaking, Laughing, Coughing, as shall be shewed in them; or also without the resolution of those parts very much tormenting men, only with this troublesom sense.

Hither also is refer'd the Sense of vehement and intollerable heat, with which we have seen a Man troubled in his Jawes and Cheeks, and a Woman also on the sides of her Tongue, without any appearance, even to the last, very long for many years.

Which *Sensation* we may refer to the depraved sense of Feeling, or if this happen the member being half stupid, and nevertheless perceiving this trouble (whence *Archigenes* called it *a stupid pain* not so unhansomly, as he is reprehended for it by *Galen*) we may at least refer it to *the sense of Feeling impaired*, or hold it an Affect compounded of these.

Hæmodia.

Whither also we refer that troublesome sense which somtimes is wont to befall the Teeth in chewing, which they call *Hæmodia*, and count it a stupidity of the Teeth.

To which also seems due to be ascribed that sense of the highest pain, which the Fingers being cooled even to a stupidity, and suddenly again Heated, reaching even to the roots of the Nails, by reason of the præceding stupidity, yet because here happens a high and lasting Pain by reason of the sudden change and alteration we shal refer it to pains and there explain it.

The Causes.

The Cause almost of every true Stupidity lies in a Nerve, which may be in every Nerve, seeing every Nerve is endued with the sense of feeling, and doth communicate the same to the part into which it is inserted, with an influx of the animal spirit and communication of its own substance, as we have taught in our *Anatomical work*; the which being thus affected, *that communication is intercepted*, or wholly, or in part, impeded

impeded: if this come to paſs in a Nerve, which being inſerted into a Muſcle, together with the ſenſe of feeling doth give it motion too, it muſt needs be that both a Reſolution and Stupidity do happen together, as ſhall be ſaid in a Palſey; which when it comes to paſs in a general Nerve affected and communicated to many parts, there muſt needs follow alſo a more general hurt common to many Muſcles, and yet not only to them, but alſo to the Skin and Membranes, ſeeing from the Nerves of the Muſcles, branches carried to theſe parts alſo do beſtow on them the ſenſe of feeling; but if it happen in ſome private Nerve carried to one part only, then it muſt needs be that that only is hurt; as this ſhal be more fully explained, in the Reſolution of Voluntary motion or a Palſey, ſeeing this Function which is aboliſht, is the more excellent.

An affect of the motary Nerve is the Cauſe of a ſtupidty hapning with a Palſie Reſolution or without it.

But from the forementioned affect of the ſame Nerve, whether it be a general or particular one it may come to paſs, that Motion may languiſh or ceaſe, the ſenſe of feeling remaining nevertheleſs, either entire, or at leaſtwiſe obtuſely, ſeeing for the exerciſe of motion, there is required a greater ſtrength of ſpirits, than to feeling, as alſo ſhal be explained in a Palſey.

An affect of the ſenſitive Nerve is the Cauſe of ſtupidity without a reſolution.

Yet it may alſo come to paſs, that a Nerve being affected, there may only be a Stupidity, motion ſtill remaining in the part, *viz.* if only a ſenſitive Nerve be affected, which ends not in the Muſcles, but in the Skin or a Membrane, or only in their other immovable bowels; which eminent cutaneous Nerves, we have ſhewed in the diviſions of the great Nerves, are only implicated in the Skin and Membranes, and carried to the natural parts, Nerves of the ſixth and ſeventh conjugation do only communicate the ſenſe of feeling to many of thoſe parts which are not moved; and other ſenſitive Nerves are carried from the motary Nerves inſerted in the Muſcles, to thoſe parts alſo which are not moved, which ſenſitive Nerves or motary Nerves alſo being hurt, but carried out of the Muſcle, then it happens that that part only becomes ſtupid into which they are inſerted, either altogether, or in part, according to the greatneſs of the hurt; yet the cauſe of all which may be the ſame as that of a Reſolution, only differing in the diverſe ſcar.

The affects both of the motary and ſenſitive Nerves cauſe Formication

Alſo that Depraved ſenſe of Formication ſo called, with trouble in the parts may happen by reaſon of any Nerve whatſoever, both Senſitive and Motary, to wit then, when the Animal ſpirit being retained a while in the ſtupid or palſied Member doth run back again into it, with a certain force and violence, the impediment being taken away, for then about the extremity of the Member eſpecially, as about the Fingers whether the ſpirit is carried at the firſt violence, or elſewhere alſo where it reacheth, an itching and ſenſe of pricking doth trouble them up and down, the ſpirit every where pricking as it were and tickling the member, ſo long, til they being ſufficiently flowed to it, the part return to its ancient abſolute ſenſe of feeling; the which alſo ſomtimes happens upon the ſtrong percuſſion or ſmiting of ſome ſenſible Nerve, as on that which wound about the gibbous part of the elbow runs forth to the little and ring-finger, which being violently forced by a fall, theſe two fingers, ſuffer that ſenſe of Formication for a while til the Nerve which was compreſt by the blow be dilated again, and the ſpirit being ſufficiently tranſmitted, the which alſo may happen in other places in cutaneous Nerves.

The affect of a Nerve both motary and ſenſitive induceth a depraved ſenſe of heat or cold.

As alſo a Nerve being filled with the Afflux of a cold humor, the members which are affected do perceive a Senſe of that Air, or of Cold Water (as we find with our Tongue, the like cold air comes forth out of a hollow Tooth that is troubled with a cold defluxion) The which *hot Air* or *Water* from the plenty and violence of a hot ſpirit, which cannot paſs a Nerve obſtructed, being there plentifully gathered together, by its heat giving ſuch a ſenſe, in like manner as was ſaid of the Cold, moleſts the member which it affects; which as it may happen in all the Nerves that bring reſolution alſo or ſtupidity ſo alſo it happens in them which, from the ſixth and ſeventh conjugation give motion and ſenſe to the viral and natural parts, it produceth about the Stomach and Gullet that heat we meet with as hath been ſaid: the Cauſes of which we ſhal more rightly explain in a Palſey, ſeeing that doth either go before, or accompany, or follow theſe affects.

An affect of the membranes & skin producing ſtupidity without paſſying.

That the Cauſe of Stupidity may be in the Inſtrument of the ſenſe of feeling, to wit in the skin and Membranes, ſeems very likely, ſeeing their ſubſtance is made up of a Nerve dilated, not when the native heat being wholly extinguiſhed, theſe parts die by a Gangrene, but when they are ſtupid only, ſo that theſe inſtruments of ſenſe either feel nothing or obtuſely; the which *Fernelius* hath writ hath ſomtimes hapned in the skin of the whol body, as hath bin already ſaid, from Drunkenneſs; in which caſe if Wine did not do this by its Narcotick vertue, becauſe it cauſed a general ſtupidity as hath been ſaid in a Conſternation of mind, certainly its *Narcotick faculty* did manifeſt it ſelf only in aboliſhing the ſenſe of the Skin; the which notwithſtanding could ſcarce be done by Wine or other Narcoticks, but alſo the vertue of the brain and Nerves muſt be dulled too; and therefore after the Drunkenneſs was over, perhaps by reaſon of the external coldneſs of the Air, in which Drunkards oftentimes lie aſtoniſht, it might befall this Drunkard alſo his skin being thus ſtupified: ſeeing the cold from without being a long while received perhaps may ſometimes cauſe ſuch a ſtupidity in ſome part of the skin which endured this cold: for otherwiſe this can ſcarce happen from an internal cauſe; but how it hath hitherto been beleeved that the inſenſible and ſtupid skin of the Elephantiacal is rendred ſo from ſome internal cauſe and Diſeaſe of the skin, that being prickt it feels not, and upon what account that is true, we ſhal declare in the Elephantiaſis.

Neither could I ever find, that by an external Narcotick applied to the skin, that could be rendred ſtupid or free from pain, that I might know ſomwhat certain, I have applied a Maſs of Opium mollified to a Gouty part full of pain, but without any profit; but what they write for truth that this may be done from the touch of a Torpedo not only taken in the hand, but alſo if it be toucht with a Fiſhers Rod, it wil ſtupifie his hand; I ſeeing I obſerved no ſuch thing at *Montpelior* where they handle and eat Torpedoes dare not affirm it for truth; wherefore we ſay this diſeaſe is rare, and which can ſcarce happen, that the skin only became inſenſible, the member which it covers not being ſtupid too by reaſon of the Nerve affected; unleſs perhaps occaſion be

be given, when by reason of an impediment, that the Skin being more thick and hard, then that it can perceive the true feeling of any thing exactly, we would call it the cause of that Stupidity the which notwithstanding is no waies a true Stupidity.

The Membranes also being Intrinsecally affected, and Nerves not hurt too, a Stupidity can scarce happen for their sake only.

An affect of the Nerves about the Teeth, causeth a Hæmodia.

And neither is that *Stupidity* which befals the Teeth or rather that trouble when the teeth are an edge from the Teeth alone, because they are distitute of the sense of feeling as other Bones, but that the Teeth are too much exasperated and refrigerated by the eating of acid and cold things, which both by their thinness and coldness are enemies to the Teeth and Nerves, that happens from the continuation of the Nerves and the sensible Membrane with their roots, by which it comes to pass that the Tooth it self seems to feel. The like Distemper may be impresst by contact on that part where the Teeth touch, and so their feeling being changed, as when the Teeth being prest in chewing, they press them as swelling up, thence ariseth that trouble some sense which they call *the Teeth an edge*.

The Cure.

The Cure of a Stupidity from what cause soever.

The Cure of a *Stupidity* because it hath joyned with it other, and for the most part grievous Symptomes, which proceed from the same cause, it shall rather be explained in them, that we need not repeat the same cure twice: as if it be by fault of the Nerves as we have said that all *Stupidity* happens by reason of them, and there be a resolution also, the same cure is due to them both, as shall be explained in a Palsie, or though that be not yet present, but only a *Stupidity* possesseth the part, yet because it proceeds from the same cause as a Palsie doth, whence they call *Stupidity, a Diminute or imperfect Palsey* with the same labor, the Cure of it also will be described there.

The sum of which Cure is this, That *if it be from a Humor it be emptied, if from blood by the taking away of Blood by Revulsion and Derivation, if from flegm or other Excrementitious Humors, by purging it out with general and particular Purgers, if from any other external cause by removing of that* in the first place, *also by refreshing and strengthning the Nerves with things that alter.* Then that we Allure and Attract the Animal Spirit to the stupid part which is destitute of it, by things that do it actually and potentially, the which shall be explained in a Palsie and Atrophy, because they attract the blood also, amongst which these are chiefly used in the Cure of a *Stupid Member*.

By Friction of the Stupid part with the Hand, applying also warm clothes, by Application of Cupping-glasses with much Flame, by Pication also often repeated, and by other things that cause pain, we allure the Spirits.

Also rubefying Sinapismes are used, applyed to the affected part, anointings with divers *hot Oyls*, amongst which that is chiefly commended, in which *Nettle-seed* hath been boyled; also *Time, Rue, and other things appropriate to the Nerves* are commended, and other *Oyntments* which we are wont to use in an *Atrophy*, we use here also.

Fomentations and Baths of warm water, first a little warm, by and by hotter are convenient, increasing the heat by degrees, to which we add somtimes *Wine* and *Lie*, and oftentimes we boyle in it, *Time, Rue, Sage, Chamomel, and hot Seeds*.

A Cataplasm of Pigeons dung, Goose dung, adding *Bayberries,* is approved of, also with *Oyls* and *Fats* and *hot Herbs*,

The treading of Grapes, if the Feet be stupid, or if the stupid Member be thrust into a heap of fresh Grapes whiles they are hot, or be dipt in new Wine are accounted for singular remedies in turning away the Stupidity.

Also the which forementioned *Topick Remedies* applied to the whol Body may do good, if the Stupidity come from a too great refrigeration of the Skin and the Nerves lying under it.

The Cure of Formication and the false sense of heat and cold.

And if a depraved or impaired sense of feeling arise in the said Formication or with a sense of that Air or Water, because here also is some Stupidity, it shall be cured after the same manner.

The Cure of a Hæmodia To be *explained in the pain of the Teeth, as also of the pain about the Nailes.*

But if in the same sense depraved the pain doth exceed the Stupidity as in the Stupidity of the Teeth, which they call Hæmodia, or in the pain of the fingers reaching unto the Nailes as hath been said, the Cure shall be more rightly explained in the pains of those parts which are afflicted.

CHAP. VI.

Of the hurt of Tasting.

The Kinds.

The defect of Tasting.

THe Tasting faileth, because the Gustatory instrument doth not perceive at all or impairedly, the savours of things; the which because it is endued also with the sense of Feeling, either it looses the same also with the Taste, or the Taste only is weakend, he sense of Feeling remaning.

A Depravation of the sense of Tasting, is when it perceives the savors of things not such as they are, but conceives them as if they were of another relish, then indeed they are, as when those things which it tasteth, whether they be Insipid, Alimental or Medicamental, it thinks them to be dry, Sweet, Salt, Bitter, Sharp, Sour, when yet their relish indeed is nothing such.

A Depraved or false Tasting.

The Causes.

The Cause of the hurt of Tasting seldom lies in a Nerve, unless the Brain being hurt too as was said in an Apoplexy doth produce an Abolition of all the senses, of which we have already treated; but more commonly in the Instrument of the sense of Tasting, *viz.* in the common coat encompassing the mouth. chiefly there where it invests the Tongue and Gi ts the Palate, if it be either too much dryed, or covered with filth, or besmeared with a strange Humor or Vapo r.

If

The drineſs of the coat compaſſing the Mouth, is the cauſe of the defect of Taſting.

If it be too much dried and hardned in that called a Roughneſs and Ruggedneſs, then the taſt is hindered, or loſt, or impaired ſo that all things ſeem unto them to be taſtleſs and woodden, as they are wont to complain, becauſe for the ſenſe to perceive aright, a decent ſoftneſs and moiſture are required.

But this proceeds from the Inſpiration or drawing in of the Air not by the Noſtrils (becauſe ſo the Air naturally paſſing through the largneſs of the Noſtrils preſently into the rough Artery, and not touching the inward parts of the Mouth, it can no waies dry them) but when tis drawn with an open Mouth, then ſucking up the moiſture of the Tongue and Jawes, and by ſo much the more, if it be both hot and dry, it dries up thoſe parts, and makes them hard and rough, and unfed and uſeleſs to taſt aright, the which as it is wont to happen to the waking, ſo eſpecially to thoſe that ſleep with their Mouth open, both ſound and ſick, either from an evil cuſtome or becauſe the Noſtrils being obſtructed when the Natural way of reſpiration is ſtopt up, either wholly or in part, they are compeld to draw in the Aire through the Mouth either all of it or the greateſt part, if it come not ſufficiently through the Noſe.

The drineſs of the Coate compaſſing the Mouth with blackneſs is the cauſe of the want of Taſting.

The which alſo comes to paſs, if the Body being too much heated they have need of a greater inſpiration of the Air, then the Noſtrils alone can admit, that then they draw it both with ful Noſtrils, which upon that account are at that time wont to ſpred themſelves for drawing in of Breath. and with an open and dilated mouth, as it befals them in their ſleep who have filled themſelves with hot Meats; and in hot Diſeaſes, internal Inflammations and Feavers the drineſs of the Tongue is a frequent Symptome, in which the neceſſity of Inſpiration doth not ſo vehemently dry thoſe parts, as the hot Expiration kindled from thoſe hot Diſeaſes not only paſſing through the Noſtrils but the Jawes alſo and dies them with a Black, or Green, or Yellow collour.

Which drineſs of the Tongue, Jawes and Noſtrils is felt by the Patients themſelves, becauſe they very much complain of them, and the Chyrurgeon may eaſily know it, by the touch, and ſight; the which alſo oftentimes grows ſo ſtrong, that the Tongue appears cleft, not only long waies, but cut croſſe waies alſo, and when for theſe cauſes they utter their words ill, the Patients oftentimes ſtutter, whence the Phyſitian ſomtimes gueſſeth at theſe affects of the Tongue, before he looks upon it.

The ſlime of the Coat compaſſing the Mouth, the cauſe of the defect of Taſting.

If the Tongue or Jawes be covered with that called Slime that they cannot by contact exactly perceive the ſavors of things, they are ſo hindered by interpoſition of this inſenſible matter, that thoſe things which they taſt ſeem to have no reliſh. But this Slime is generated of the Spittle, otherwiſe naturally moiſting the Jawes, but then eſpecially in thoſe places where it adheres to the Jawes, either by reaſon of its drineſs obtaining a Tenacity, or by the mixture of ſome other humor, having gotten a thickneſs. For it is dried for the ſame cauſe, from which we have ſaid the Succingent Coate was arefied, whence a dryneſs of the Jawes and plenty of this ſlime, eſpecially on the Tongue do often concure in the ſame cauſes and Diſeaſes, and then alſo they do more prejudice the Taſt the Cauſe being doubled; but the ſpittle grows thick there by mixture, by reaſon of a Vapor continually evaporating upwards from the firſt concoction, cleaving to the Tongue, Jawes and Teeth (to which thisſlimy matter grows, and at length is turned into that which is Tophous) and mixt with the ſpittle ſomtimes with various colors and ſtinkingneſs fouling thoſe parts: the which alſo is wont to happen in ſound Bodies, eſpecially if they ſleep at night with their mouth wholly ſhut, ſo that the Vapor aſcending cannot evaporate, and they do not waſh their mouth in the morning; whence the forementioned parts for the moſt part are ſucceſſively infected with this white ſlime, and in ſick people reſembling the condition of the putrid and malignant humors, being ſomtimes white like pulſe, ſomtimes yellowiſh, ſomtimes black it affects and beſpots the Tongue, Jawes and Teeth, but the ſpittle being made more Tenatious by the mixture of Flegm, ſticks to theſe parts, as if it were glewed; the which alſo oftentimes befals the ſound from defluxions, or the ſick, and ſomtimes for that reaſon acquires ſo great a Viſcoſity, that it can ſcarce be waſhed or ſcraped off: and alſo it takes from Tenacious Viſcous Nouriſhments, a certain viſcoſity, by which it grows to the ſaid parts.

And this ſlime is eaſily known by its color and ſubſtance, and by this the affect, whence it proceeds.

A ſeaſoning of the Tongue the cauſe of a depraved taſte.

The Coate alſo encompaſſing the mouth deſtined for taſting is ſeaſoned with a Humor and Vapor endued with a ſtrange ſavor, the which as long as it perceives, it cannot rightly apprehend other things offered to the taſt, and judg what they are, but thinks them alſo to be of the ſame ſavor, with that which it is already affected with.

This ſomtimes comes to paſs from ſome things taken whoſe ſavor is ſo imprinted on the taſt, that it cannot ſo quickly yeild and give place to other ſavors, or being mixt with them, it doth alſo preſent a falſe ſavor of the thing unto the taſt; the which ingrateful things do, if they be taken often, or thoſe things which do very much affect the taſt with a ſtrong ſavor. As when meats endued with an Alimental ſavor are offered to the ſick, which for the moſt part, they are wont to loath, and are thruſt in as it were by force, then whatſoever they take afterwards though of another ſavor they perſwade themſelves, hath the ſame Alimental reliſh, or ſmels of it: and when ſweet things are given to thoſe that are feaveriſh, being for the moſt part ingrateful to them, they judg all things afterwards to be ſweet; and alſo in the ſound, things being taſted that are very Bitter, Salt, Auſtere, and adhearing long, they do chang the reliſh of thoſe things that follow; and hence it comes to paſs that after taking of rotten cheeſe after Vinegar in ſauces, if they drink Wine, it appears not ſuch as it is, but either bitter, or to others more ſweet, according to the diverſity of Natures.

A ſtrange ſavor proceeding from an internal Cauſe doth alſo deprave the Taſte if ſuch a Vapor or Humor do inſinuate it ſelf into the Coat which perceives the the Taſte. And hence it comes to paſs, that ſometimes they think all things which they taſt to be ſweet, if ſweet Flegm, or a ſweet and alimental Vapor aſcending from the Nouriſhment out of the Stomach, doth ſeaſon the ſaid Coat.

Or if an acid Vapor belcht up from the Chyle which

we have elsewhere shewn is alwaies acid, or from meat half digested, or sour Wine taken, or by vomiting raised up even to the mouth, they do infect the mouth with an acid savor. Or a salt savor also may be imprinted on the said parts from the Serum or salt Flegm falling thither; or when the Mouth is so bitter that it judgeth all things which it tasteth to be bitter too, which oftentimes happens by reason of Choler if it be collected in the Stomach, by a certain communion with the Coat incompassing the mouth, which doth also invest the Stomach; and also in cholerick sound bodies if by long fasting it be carried thither, or being moved with Anger it be poured thither; or in other cholerick Diseases and Feavers, either abounding in quantity, or boyling with heat it empty it self into the Stomach, or be generated there from things taken that produce Choller, or that do end in Choler by Corruption.

The Cure.

This disease if it proceed by consent from the Nerves or the Brain, its Cure wil be common with that of an Apoplexy and other resolutions of the Nerves which then are also present: but if the gustatory instrument the Coat of the Tongue and Jaws be affected by *Idiopathie*, and that either grow dry or be coverd with slime, or be seasoned with a strange savor, to these the Indication of Cure shal be applied.

The Cure of the want of Tasting from the drines of the coat of the mouth.

In a Drines the Cause must first be turned away, which if it arise from an evil custom that they sleep with their Mouth open, it must be changed by forbearing to use it; especially if they are compel'd to breath so, their Nostrils being obstructed, then if they sleep with their head placed higher, and the pillow under it be raised up, experience teacheth that they may thus attract the Air more freely, because the largeness of the Nostrils is then the more dilated; and if snivel or flegm obstruct the Nostrils, they must be purged by Errhines and if a hotter course of living doth bring this drines, let them abstain from hot and salt meats, let them dilute their Wine wel, let them use Sallets at Supper especially, of Lettice, Succory, and the like, and let them not heat their body too much no other waies; then that the Air may not often enter the mouth and dry it, they ought to speak little, and spit seldom, seeing the spittle retained a long time, because it is glutinous, doth chiefly moisten the Tongue, and if it be dried, doth lenifie it again.

If this happen in some Internal hot disease especially as in burning and Continual Feavers the Cure must chiefly be directed, *to extinguish the heat of the Feaver*, & chiefly then, cold Epithems must often be applied, to the Heart, Liver, and parts from whence the heat chiefly ariseth. Afterwards Remedies shall be fitted to the coat of the mouth by lenifying and moistning this roughness with things soft, gluminous, and fat, which either they may keep in their mouth, chew, lick, or wash the mouth with them, or if they cannot, let their Tongue be anointed with the Finger or a Stick applied to them.

Prunes, Tamarinds, Sebestens, such as are kept dried, if being mollified again, with a gentle heat, they be kept in the mouth, lenifying with their grateful relish, they correct this fault.

Fresh Apples sliced, chewed and held a little in the mouth, do perform the same, as also *the flesh and juyce of Melons, Guords* and especially of *Citruls, fresh Pursiane* as being eaten it doth presently correct the roughness of the Teeth, so also it doth very much lenifie the jaws, the which also *Lettice* held in the Mouth and chewed, doth.

If those things be conteined in the Mouth, which do actually Refrigerate, by extinguishing the heat they correct the drines, as Cold water, and Stones amongst which the Chrystal is beleeved to bring somewhat peculiar.

The following Remedies also must be licked, or put into their Mouth which do correct the drines of the Tongue and Jaws, by their mucilaginiousness.

As, Take *the white of one Egg, beat it wel with Sugar til it grow white*, use it.

Or thus, Take *of the Mucilage of the seeds of Quinces and Fleawort extracted with Rose-water, of each half an ounce; Syrup of Violets one ounce*, mix them wel.

Or, Take *of the aforesaid Composition one ounce, to which also* you may add *of the Mucilage of Apple kernels and seeds of Mallows half an ounce, the Infusion of Gum Tragacanth in Rose-water half an ounce, Sugar candy* (especially if the Tongue be foul too) *Honey of Roses of each two drams*, mix them.

These Compositions made a little thicker being received in broad baggs, and often moistned with Rose-water, he may lay on his Tongue, and so keep them a while; or let Cloaths be moistened in these Liquors and be applied in like manner.

Which also may be done in this Decoction. Take *of Sweet Prunes six, Violet flowers one pugil* (because they have a glutinousness) *Barley clensed one ounce, Quince seeds two drams, Fleawort one dram, Gum Tragacanth half a dram*, boyl them in *Water* for the said use, adding a little *Honey or Sugar*.

Things somwhat Unctuous, but made of those which are most pleasing, being administred after the same manner, do egregiously contemperate this drines.

Of which sort this is, Take *of Fresh Butter*, or instead of that, *Oyl of sweet Almonds newly drawn, as much as is sufficient, White Sugar, or Candy, or Sugar of Roses*, beat them together, and let him lick it.

Or thus, Take *the white of one Egg, Starch Corn one dram, Milk as much as wil suffice*, beat them wel, boyl them a little till it becomes a Frumenty, add *of Fresh Butter the like quantity, the whitest Sugar as much as is sufficient*, make a *Hasty pudding*, which let him use.

The Fat of a Hen or Capon boyled a little that it may be the more grateful, may perform the same.

Syrups of Violets, Jujubes, or others, may be licked so, or held in the Mouth.

Lotions for the Mouth may be made of the same things, dissolved for this use.

Or after this manner, Take *of Syrup of Violets, Jujubes, of each one ounce and an half; the Decoction of Barley clensed four ounces*, let him use it.

Or thus, Take *of the fresh Leaves of Pursiane and Lettice of each one handful; the flowers of Autumn Mallows, Doggbead, Barley clensed, of each one pugil; the Roots of Liquoris one ounce, the seeds of Fleawort two drams, the seeds of Poppy one dram*, boyl them in *Water*, and *in one pound* dissolve *the white of one Egg beaten, Honey of Roses clensed, Syrup of Violets, of each one ounce*; let him use it.

It is very convenient to wash the Mouth often with cold Milk, especially with Butter-milk.

The Cure of the want of Tasting from a drines of the Tongue with blackness joyned to it.

But if that Blackness, Greenness, Yellowness, joyned with the Drines, doth signifie that the Tongue also is infected by Malignant vapors it is an ill sign, and so much the worse,

worse, if heat be added to it. Then those things being first administred which are due to a burning, malignant or pestilent Feaver, we must use things more cold and repressing malignity, especially acid things, adding alwaies some things Lenitive, that they do not too much exasperate, of which also we wil treat in the Inflammations of the Jaws, to which also we add these following.

Let them keep in their mouth sharp Fruits and chew them, as *of Physick fruits, Orenges, Lemmons, Citrons or Pomegranats, or other Apples, Prunes, Cherries, Currans, and bunches of Barberries,* and of *herbs, Sorrel, Lettice, Purslane,* but first *steeped in Vinegar* or *acid juyces*; or in *Sallets, as flowers of Succory, Violets, with Vinegar,* and *the like.*

Then let them wash their Mouth often with Rose-vinegar diluted with Water; or with Sorrel-water.

Or with the Acid Broth of that seasoning of Cole-worts and Rapes, and use that Acid Liquor either crude, or distilled first, which is Chirurgeons most excellent Remedy for these things approved on by experience.

If a little Camphire be added to pure Water 'tis also a fit Remedy.

Or let it be made after this manner, Take *of Rose-water three ounces, Nightshade water two ounces, the white of one Eg beaten, Camphire dissolved in Vinegar half a scruple,* mix them.

Or such a Julep, Take *of simple Syrup of Vinegar two ounces, of simple Oxymel one ounce, the waters of Roses, Violets, Water-lillies, of each three ounces*; mix them.

Some commend this very much, Take *of the Water of the greater Housleek, to which* add a little *Sale Ammoniack.*

Yet after the use use of these, we must alwaies come to those things which Lenifie also, the which have been already spoken of.

Amongst which this also is commended above the rest. Take *of the pulp of Guoard seeds, choice Manna, Sugar candy, of each one dram; with simple Oxymel* make *Forms,* which he may keep in his mouth.

The other Remedies, especially if there be a great heat joyned and as it were an Inflammation, are explained in the Inflammations of the Jawes.

If slime growing to the Tongue and Jaws, do prejudice the Tast, and do also bring trouble, by its tenacity and stinking, the cause must first be removed.

The Cure of the want of Tasting from slime of the coat compassing the mouth.

Which if it proceed only from the taking glutinous things 'tis easily prevented by washing the mouth alwaies after meat taken, till the reliques of these meats, or thick juyce, which do adhere, be washt of.

The same must be done also in the morning alwaies after they are up, if such filth be collected, either by reason of this Cause or from Vapors raised from the Meats at night, and the Teeth must be diligently clensed and rubbed, as also shal be explained in their faults.

And that Fewer and less thick Vapors may arise, we must take Care the Supper be sober.

And lest that these exhalations being retained in the mouth, in progress of time may grow to the said parts, they must accustome to sleep with the mouth a little open, which when some are not used to do, by interposing a cloath, or holding a little cane in their mouth, they ought to make a way for the vapor.

If flegm breed this Tenacity in the Spittle, the afflux of that must be diverted, and that must be forced and spit forth by hawking, premising if it come hard, the Lotions that shall presently be named, to cut and clense it.

But if the Cause or a hot Disease, an acute, malignant Feaver, by drying or sending up filthy vapors and so incrassating the Spittle, do produce this thick filthy slime; first having respect to the Disease and the Cause as hath already been said formerly, Topick means as well in this as in another persevering cause, must be applied to the part affected as followeth.

We take then out of the Mouth chiefly from the Tongue, Teeth, Gums and Jaws, this slime if it abound very much, with those things which have an abstersive power, and if it be very tenacious, incisive also, with which are mixed things lenitive, that they may not exasperate the Tongue, especially if that be dry too, applying also things that work actually, in the interim ever and anon washing it, and if it yeild not easily, scraping it.

The mouth is washt with things abstersive, as with the Decoction of whol Barley. Also with Whey, with Milk and Sugar.

Or with this following, Take *of whol Barley, Red Pease or Vetches of each one pugil; roots of Liquorish one ounce, Figs twenty, flowers of Autumn Mallows one pugil,* make *a Decoction* and in *one pound* dissolve of *Honey* or *Sugar two ounces.*

After washing let him hold Sugar candy in his mouth, or Lozenges of Sugar, Roses, or *Manus Christi,* or let him lick a little Honey of Roses.

If there be need of a greater Abstersion and Cutting, certain hotter things and acid things are added too, if the flegm be very tenacious.

As, Take *of Barley, Vetches, of each one pugil; Liquorish one ounce and an half, Leaves of Sage, Marjoram, Hyssop, of each two drams; Quince seed one dram,* make *a Decoction in Water and white Wine,* add *Honey of Roses two ounces, Sugar Candy one ounce, wine of Pomegranates or Vinegar a little,* mix them, make *a Lotion for the Mouth*; if you add *as much Allum* or *a good quantity of it,* when it is very tough, it is most powerfully abstersive.

Or, Take *of the waters of Roses, Plantane, Nightshade, of each two ounces; the waters of Sage, Marjoram, of each one ounce; simple Oxymel two ounces, white Wine Vinegar a little.*

Let him take often one spoonful of Oxysaccharum, or Hydromel, or of simple Oxymel, or of Squils, if it be very tenacious, and after some time let him wash his mouth, and again repeat the Syrups, to which if it give not way, some portion of Allum must be mixed with them.

Or Vinegar of Squils diluted must be held in the mouth, with which I have somtimes observed, that the most tenacious matter, which formely could be taken away by no means, hath at length departed from the mouth.

This matter also must be scraped off, if it stick pertinaciously, yet so that we do not too much exasperate the Tongue, and so give occasion to a greater Inflammation, especially if it be very dry and cleft, in which thing Chirurgeons offend often.

But this is done by rubbing the Tongue, as also the Teeth, Palate, with the finger or an Instrument fitted for it, coverred with a Linnen cloth, and dipt in the Lotions above-mentioned; which also is commodiously done with the Leaves of Sage, Mint, moistened after the like manner: also that filthiness is scraped off with a round usual Instrument made of Sallow or silver, such as Chirurgeons have, drawing it leasurely over the Tongue, in the interim oftentimes washing the mouth and by & by again lenifying the Toung with an Oyntment; but oftentimes the flegm is so tenacious and the slime thick like Frumenty it may be laid hold on by the

hands,

hands and so taken forth, or drawn, and by that means forced to yeild.

The Cure of a depraved taste from the seasoning of the Tongue.

If a Vapor or Humor season and fill up the Tongue with a strange savour, that it perceives not other things at all, or amiss, the cause also must first of all be declined.

Which if it proceed from things taken, seeing it doth no waies induce a long lasting affect, and ceaseth of its own accord, 'tis neglected; or will easily be amended with the contraries, as shall be said by and by.

But if this arise from an internal disease, a filthy vapor or a cholerick alimentary humor heaped up there, the intention of curing is directed, to the evacuation of these humors, and healing the Diseases.

But if that adverse savor doth no waies cease the cause being taken away, but persevering a long time, be troublesom to those otherwise sound and to the sick, the contrary savor being procured by things given, we either take away or amend the former which did trouble.

So the Sweet savor as wel the Alimental as that which is sweet indeed being very adverse for the most part to the Feaverish & other sick folks, the which notwithstanding was otherwise most grateful to them in health, is corrected chiefly with acid or tart things, which do not only mend that, but also bring an appetite too, which sweet things take away, and asswage the thirst, which sweet things increase; which acid things let them keep in their mouth, and lick, amongst which acid Cherries such as are wont to be kept dried and softened again, and many others of that nature, which shal be explained in thirst do very much and this nauseous unsweetness of the mouth.

The which bitter things also do likewise correct, being more acceptable to some natures, especially if they consist of a sweet smel as principally Wormwood in Wine which adds a greater gratfulness to it.

As the bitter savour again too long sticking on the Tast is corrected with Sweet or Acid things, and with those that are insipid, which also do dull the vertues of them which otherwise would inflame the Jaws.

With which also the salt savor is contemperated, as again the salt savor is dulled with things insipid.

CHAP. VII:

Of the hurt of Seeing.

The Kinds.

Blindness. THe Sight is wholly abolisht in some, that at all times and alwaies they see nothing, and it is called Blindness; in which Species if no fault appear in the Eyes which may hinder seeing, & they are blind with open and cleer Eyes, it is called *Amaurosis*; for if either a Speck or a Coat, or a Humor appearing about the black of the Eye, makes them Blind it obtains a private name from the Cause as shall be said in the Cause.

Amaurosis a kind of blindness.

But otherwise they lose their sight only, at a certain time, the which nevertheless by and by returns again, no impediment then also being conspicuous in the Eyes; as when from an external cause by reason of brightness or darkness, objected too much or too suddenly to the Eyes. They are so darkened, that the seeing being hindred first as it were with a Cloud or Fume impeding, through which there seem to run, certain smal bodies somtimes dyed with a red, yellow, or black color, by and by is for a while wholly taken away, in the affect which is called *Scotoma*.

Scotoma *an Obscurebration a kind of blindness.*

Somtimes the Sight is only impaired in some, when those species of things which the sight otherwise ought naturally to attain to, whersoever and whensoever, they behold not wel, or obscurely; and that for the most part, no cause also shewing it self in the Eyes and they call it *Amblyopia* that is an obscurity, dulness or darkness of the sight. Although some think if the Eyes by some manifest fault do see impairedly as with a mist before them, it might more properly be called a dulness, and in old folks they call this fault a darkness.

Amblyopia *a weakness of the Sight.*

Darkness a kind of weakness of Sight.

Hither also is refer'd that weakness of sight, when the sight perceives things neer no better than those remote as naturally it ought to do, but those neer the Eyes it apprehends less than things distant, and therefore when they would see small things, or read them, they are forced to remove them far from their Eyes; a fault familiar to those that grow old, which when it may be amended by a fit pair of Spectacles, let them continually use them in apprehending of smaller things, for which cause I am wont to call it The old folks sight.

The sight perceiving things distant more rightly than neer.

But it happens also on the contrary manner that some can no waies judg rightly of things remote, yet not so remote that sound men also cannot sufficiently see them by reason of the too great distance, but only removed for a little space, although they be very great; whence oftentimes not knowing their Neighbours, they pass them by unsaluted; Pictures, Writings, unless they draw neer with their Eyes, they can neither see nor read handsomly, unless they use spectacles appropriate to correct this fault, imbred for the most part with yong folks from their birth and remaining even unto extream old age, which approaching, sometimes it comes to pass, that then they see better those things distant which they saw less in youth, and how much the elder they grow, so much the farther sighted, which species therefore I am wont to call, The young mans sight.

Sight not rightly discerning things a little distant.

But of those also who do less behold things somwhat remote, there are some who unless they apply close to their Eyes things somewhat smal or writings as it is commonly said, touch them with their Nose, they cannot rightly discern or read them, beholding them with askew and closed eyes who from their cradle even unto old age for the most part, seeing after this manner are called *Myopes*, some of which are helped by the benefit of Spectacles, others not.

Sight not rightly judging of things unless close to the Eyes is Myopia.

We meet also with another weakness of Seeing, when at night by the light of a Candle, they see little or nothing almost, but in day time by day-light they perceive no impediment in

Nyctalopes.

their

their sight which they call *Nyctalopes*, the Latines call *Luscios*.

The Evening Eye-sight.

But it happens also in some, that they see in the Night in the dark without light more acutely than in the day time, as Owls, a rare disposition which they call the Evening Eye-sight, for we would rather retain those names which are usual and rightly design the things, then confound them amongst themselves as commonly they do, signifying many things by one name.

Hallucination.

The Seeing is depraved first of all when things are represented unto it otherwise than they are indeed, as if they see those things which are single for double, as sometimes it fares with Drunkards, who behold streight things for crooked, or some other way things under a false shape, which fault is called Hallucination.

Imagination

Secondly if they think and Imagine with themselves that they see things that are not whence they call this affect Imagination: as it happens when in an Alienation of mind and Ravings, as hath been said there, they think that they see divers apparitions whiles they are waking, such as otherwise they are wont to meet with in Dreams, or that Flies, or Gnats, fly up and down, Straws, Locks of Wool adhere to things, the which also sometimes is wont to happen to those no waies besides themselves nor otherwise sick; that the same insects or locks of Wool, and filaments, Spiders webs and the like small things and Atomes, seem to appear to one Eye or to both together, in which because for the most part they think that they see also a little Cloud, this fault is called *Nubecula*.

Nubecula a Species of Raving.

Colors a Species of Imagination

Brightness a kind of Imagination.

Thirdly hither belongs that false vision when also without any hurt of the mind other colors then are, are offerd to the sight, now red, then yellow, or green or some other way representing themselves with a ful light; the same appear coloured like a Rainbow in the compass and as it were the circle of the flame of a Candle, or of some other thing lighted: or Brightness like lightning, or other shining bodies obscure the sight.

Fourthly to the depravation of sight these also must be referd, when the things which they behold, although they be firm and stable yet they think that they are carried about, driven round, and wheeled about, so that though they know this is a false imagination, yet when from that turning round of things, the sight doth no more perceive a firm seat where the body may subsist, that also stumbles & staggers; sometimes also if the pavement on which he stands seems to him to be inverted, as if he also were inverted with it, unless he be sustained or kept up, he falls and suddenly rusheth down, and beats the Earth with his Feet, whiles he endeavors to stay himself, all the other senses being nevertheless entire, by which sign this fault called *Dinos*, or *Vertigo*, is easily distinguished, from an Epilepsie, Apoplexy, Syncope, with which those that are strucken, do presently also fall on the ground.

A Vertigo with Imaginations.

But besides this unquiet Vision those troubled with a Vertigo there comes also sometimes another depravation of it, which we have called Imagination and a little Cloud (and upon this account, they have named these imaginations, A beginning or smal Vertigo) a Cloud or other bodies, or Colours also with them offering themselves to the sight; the which notwithstanding if it doth happen, for the most part it is wont to go before a Vertigo.

A Vertigo with darkness is Scotodinos.

Somtimes also a darkness of the sight which we have formerly called *Scotoma* doth accompany a Vertigo, when also the Eyes being shut nevertheless al things are objected to the Internal sense as if they were turned round, and then the Disease compounded of them both is called *Scotodinos*.

All which Depravations of the sight for the most part happen, no fault being conspicuous in the Eyes (unless it be offerred in that, when a strange color doth somtimes appear with which the Eye is indeed extrinsecally coloured) whether this be in the Sound or Sick.

The Causes.

The part affected.

The Cause of all the declared Accidents of the Sight is either in the part communicating the visive power, *viz.* the Brain, or consists in the Instrument receiving that power and also the species of external things, to wit the Eye; which whenas it consists of many more parts, then the other Organs of the senses, and humors also, in every one of them some causes prejudicing the sight may arise.

First of all in the visory or net-like Nerve implanted into the Eye, and the principal Instrument of Seeing; then in the three humors that fil up the Eye and serve the visory Nerve, last of all in the Membranes themselves that constitute the Globe of the Eye and intrinsecally distinguish the humors. If the Cause lie in those places where they are pervious to the sight as about the Black of the Eye, and where only if the impediment of seeing do consist, it may be seen and known, for if it be elsewhere it is so hidden that it doth no waies appear to those that behold the Eye.

The Cause of the Hurt of seeing in the Brain.

As all Senses may be hurt by reason of the Brain so also Seeing is weakned; both if it suffer a Disease General or Special and especially in that part where the optick Nerves come forth, or those Nerves themselves produced from the Brain and carried unto the Eyes, are affected; which affects may be various.

A cold Distemper of the Brain, is the Cause of Blindness, or weakness of sight

A Cold Distemper sometimes breeds Blindness the other senses being somtimes unhurt; if the Forehead and Eyes being much and a long time refrigerated by cold wind, which being less cover'd, are the more exposed to the injuries, and the cold penetrating even to that part, where the optick Nerves have their original, the said parts are so hurt, that they become Blind; or there remains afterwards a certain weakness of sight, which I have seen befall a noble Matron in the Head-ach from the too much application of Oxyrrhodines actually most cold, who all her life time could no waies recover her sight any more; that this also doth happen, if the whol brain be hurt by the same distemper hath been shewed in a stupidity, but then the rest of the senses are abolisht too, and its easily known by that, whence the cause proceeds, as if it be from externals 'tis plain of it self.

A hot distemper of the brain is the cause of error of the sight and of Imagination.

That a Hot Distemper of the Brain doth bring together with a Depravation of the Mind also a Hallu-

a Hallucination of the ſight, and the ſaid Imagination in which various falſe Images of things are offerred to the ſight, hath been ſaid in a Phrenſie.

A malignant diſtemper in the brain is the cauſe of error in the ſight.

As alſo it hath been explained there, that that diſtemper which ariſeth from the Perturbation of the ſpirits in the Brain from Malignant humors, together with Madneſs and Melancholly, doth likewiſe repreſent falſe Apparitions to the ſight.

A dry diſtemper of the Brain is the cauſe of blindneſs.

Too much Drineſs of the Optick Nerve induced by burning Feavers the eaſier into that Nerve, ſeeing it is thick, doth produce a Blindneſs remaining after theſe Feavers.

The beginning of the Nerves being compreſt or bedewed as we have ſhewed that an Apoplexy is cauſed, in which all the Senſes are taken away at once, ſo alſo if this be only about the riſe or meeting of the Optick Nerves, or in the other carriage of them out of the Eye, which then muſt needs be from an afflux either of a bloody or flegmatick humor, it is ſomtimes wont to happen, that a Blindneſs doth ſuddenly follow, if the humor preſently fall down thither.

But more commonly the Optick Nerves being irrigated or too much moiſtened by the watry flegmatick excrements of the Brain, which in this middle ſeat of the Baſis of the Brain, where the optick Nerves break forth, alwaies flow down to the Infundibulum which is next to theſe Nerves; and together with the Nerves, and neer them break forth into the Chamber of the Eye and amplitude of the Noſtrils, a darkneſs of ſight is wont to happen in old folks and flegmatick; or if they be refrigerated by the ſame humor or be compreſt in thoſe ſtreights rather then obſtructed as they would have it, a blindneſs alſo is wont to follow: which abolition or weakneſs of the ſight, together with the hurt of the reſt of the ſenſes happens, if this fault be extended to their riſe or progreſs in the Baſis of the Brain, or the ſight only is aboliſht, if that ſeat chiefly be affected, and that commonly in both Eyes by reaſon of the meeting of the Optick Nerves and their ſhort paſſage to the Eye, that is rare that one Nerve only can be ſo affected; the which doth proceed from flegm or a wateriſh humor as is ſufficiently manifeſt, by the ſigns of that humor abounding in the brain; and it is eaſily known alſo that a Nerve is affected, when nothing appears in the Eye, which can bring ſuch loſs or Obſcurity of the ſight, neither have we found this ſign to be true, which they have thought moſt certain, to wit, if the unſound Eye being compreſt the Apple is not dilated, this comes to paſs by default of the Nerve, becauſe the influx of the Spirit into the ſame is impeded, ſeeing the animal ſpirit doth not diſtend the Eye like wind, neither fils it up but perſiſts in the netlike Nerve.

The Contuſion of the viſory Nerve in the brain is the cauſe of blindneſs.

Hither alſo ſhal be referred that not unuſual Cauſe, but by no man as I know rightly deſcribed, of that blindneſs which is ſomtimes left, after grievous and frequent Convulſions; the which is not from an afflux of humor as they would have it, but becauſe in thoſe great Convulſions by the Convulſion fits of all the parts and the Eyes alſo, in which they alſo oftentimes appear convulſive and very much ſtretcht out and bowed down, the Optick Nerve growing to them being thus attracted and too much diſtended, and that being wreathed too, and hurt, and the paſſage or viſory ſpirit being hindred it happens that the Eyes are deprived of Seeing, and that it proceeds herefrom we have found out by diligent examination, and conſideration.

The ſolution of continuity in the viſory Nerve of the Brain is the cauſe of Blindneſs.

The Subſtance of the Brain being hurt as by an Apoplexy there is a privation of all the ſenſes, ſo a Nerve being contuſed or wounded there which ſome do teſtifie hath ſomtimes happened from a puncture made by the Forehead a manifeſt Blindneſs by reaſon of the Solution of Continuity or a Callus left hath ſuddenly happened, and ſo from a blow.

A Weak Conſtitution of the Brain, the ſpirits being diſſipated and waſted by reaſon of old Age, or by ſome grievous and long continued diſeaſe, too much evacuations, eſpecially of Blood and Seed whence is a great effuſion of ſpirits and immoderate Venery for that reaſon doth very much prejudice the ſight; alſo by reaſon of too much Watchings as hath been ſaid there, it induceth an Amblyopy or weakeneſs of ſight and alſo of the other ſenſenſes eſpecialy of thoſe that have a more ſubtile object as of Hearing, often familiar to old folk, as appears in theſe external cauſes of them, remaining in thoſe that are recovering, and accuſtomary to thoſe that live intemperately.

A Weakneſs of the Brain the Cauſe of weak Sight.

Beſides this cauſe which proceeds from a defect of ſpirits which there can be no doubt, we can by no means be induced, to feign another here in the thickneſs or thinneſs or ſubtilty of the Spirits as many indeed do propoſe theſe things with more ſubtilty than truth, but we are moved by many things to diſſent from them; ſeeing the animal ſpirit being wel nigh æthereal, doth no waies ſuffer ſuch changes, but is moſt eaſily diſſipated, as no man neither hath ever dared ſo much as to fanſie the Vital Spirits to grow thick or be attenuated; as alſo we ſee, unleſs now the defect of ſeeing happen from the Spirits its other diſcommodities, whence things far diſtant or neer, are leſs truly diſcerned, do happen rather from the fault of the Inſtrument as by and by ſhall be explained, not by reaſon of a certain thickneſs or ſubtilty of the ſpirits, as they have thought, ſeeing they are ſo ſubtile, that they cannot be more ſubtile.

Divers ſorts of hurt of the ſight are wont to proceed, by reaſon of the perturbation or agitation of the ſpirits of the Brain and the brain, alſo being affected by conſent with them; as if being mixt with a hot, ſubtile vapor, either turbid, or malignant, they do not only pervert the mind, but corrupt alſo the ſight ſo that they think they ſee many things which are not: as if from the like vapors the ſpirits and brain grow hot, then together with the Raving, falſe Apparitions alſo are objected to the Eyes, as hath been ſaid in a baſtard Phrenſie, and as if a certain Narcotick vertue be joyned with the heat, as hath been ſhewed to be from the evaporation of Wine then together with the Drunkenneſs of the mind, that there is alſo an error in the ſight in which they think they ſee divers things which are not, or thoſe things which are they judg of falſly, hath been declared in Drunkenneſs (as the ſtory of him who being drunk alwaies thought things to be double, being decived by his Wife, burned his hands, gives credit to this buſineſs) furthermore when other filthy and malignant vapors from the Region of the Hypochondries do aſſail the Brain & diſturb it and its ſpirits they

A perturbation of the ſpirits of the brain by vapors is the cauſe of error and Imagination with an alienation of mind.

do

do not only pervert the Mind but alſo ſometimes propoſe the ſight being cauſed by conſent ſeeing they trouble the Mind too they belong to the Alienation of the mind where it hath been largely treated of them.

The too much agitation of the ſpirits of the Brain the cauſe of a Vertigo.

But alſo it oftentimes comes to paſs that the ſeeing is hurt by the too much agitation of the ſpirits, not by that which in the affects of the mind, the ſpirits being not only agitated, but rather confounded together with the humors conteined in the Head, Heart, and whol body, doth only diſturb the mind, and ſcarce hurts the ſight: but by that in which the ſpirits in the Brain being moved either themſelves or with the mixture of a vapor, without any perturbation of the mind, thoſe called a Vertigo, Imagination and Scotomie are wont to be raiſed.

For the ſpirit contained in the Brain and its Arteries and Ventricles, being moved and ſtirred more vehemently, even without the mixture of a vapor, repreſenting to the Imagination the like commotion in things without it breeds the ſaid Vertigo of which commotion there may be divers cauſes; for a vehement moving of the head after the ſame manner continued long doth cauſe that the ſpirits for the ſame reaſon being ſtirred and following the Head afterwards reſting, yet nevertheleſs they ſtil for a while run up and down after the ſame manner as the motion of the head was made, till they reſt again; as it comes to paſes if the Head together with the body be turned long Round, for then a Vertigo follows, ſo that if this be done longer a ſtrong one comes, that they cannot ſtand on their Feet, but ſomtimes neceſſarily ſtagger and fall, as it oft happens we ſee theſe things both in men and beaſts; ſo the head being bowed a long while downwards, the ſpirits then tending from that upwards to the beginning of the Nerves, when that it is erected again, the ſame ſpirits with violence going back again to their proper ſeat, from that motion ſomtimes a Vertigo is perceived.

But if it happens not from this motion of the body only, but alſo from a perſevering or vehement commotion of the mind the ſpirits being often and ſtrongly exagitated, in profound and dayly cogitations, and other paſſions of the mind, as alſo in Watchings, that thoſe thus accuſtomed, moved from ſome light internal cauſe, fall into a Vertigo; as we do obſerve Vertigoes do ſomtimes trouble them that do very much labor at their Studies when they are faſting, for the cauſes by and by to be mentioned.

But from the long beholding of a thing whirled round or otherwiſe moved ſwiftly whether this be ſo, or ſeem to be ſo, as the Earth ſeems to be moved and run, to them that ſail, which happens to ſome from their Imagination when their Eyes are ſhut, ſome are ſeazed with a Vertigo, the ſpirits alſo by that agitation of the ſight which follows at the ſudden commotion of the object, being ſtirred after the ſame manner, and as it were following the ſwiftneſs of the ſight: which as it happens to thoſe whoſe ſpirits are eaſily ſtirred, ſo in thoſe diſpoſed to the Vertigo it gives occaſion for the fit to ſeaze, although the cauſe be but light. Alſo looking downwards from a high, ſteep, and dangerous place breeds a Vertigo in thoſe that are not uſed to it, the ſpirits being too much diffuſed, and drawn back again with fear, and ſo moved unequally; and therefore this no waies happens to thoſe that are not afraid, unleſs they be otherwiſe diſpoſed or ſome other cauſe joyned, as if from ſuch a high place they behold things which are wheeled about, or Whirle-pools of Waters.

But as this Vertigo doth happen from external cauſes by reaſon of the too great impulſe of the ſpirits, ſo alſo the ſpirits of themſelves collected in the Arteries of the Brain, eſpecially being more hot and plentifull becauſe they are unquiet do cauſe a Vertigo and are eaſily agitated of themſelves, or from a light occaſion joyning; the which doth long and much torment men from a light cauſe either alone or alſo with a pain accompanying it, whoſe Arteries do beat vehemently in their Head and Ears, with a tingling of them ſometimes and often in the reſt of the body, and they are ſcarcely cured unleſs by opening of them, as ſhall be ſaid; but this may come to paſs by it ſelf, the blood being ſo heated and attenuated in the Arteries, or by the mixture of a thin Vapor, as ſhal be ſaid by and by.

But we have found out another cauſe of a Vertigo proceeding from the ſpirits in the Arteries and Veſſels of the Head, by diſſecting a certain Merchant our Country-man, who many yeers being ſick of a Vertigo was neither able to walk nor to riſe out of the bed, but he fel down, to wit, the veins of the Brain and all its Arteries from their riſe and ingreſs within the Skul, in their whol paſſage through the Brain, grown together, and hard, and diſtinguiſht with little Glandules in their whol progreſs; from which obſtruction of them, the ſpirits being impeded and retained in the Brain, being wheeled about by a light motion, bred an incurable Vertigo.

But by reaſon of vapors mixt with the now declared ſpirits of the Brain, there are wont to be produced not only a Vertigo, but alſo the ſaid Imagination and Scotomie, either ſeazing at once, or apart; and they according to the diverſity of the nature of the Vapors and place from which they ariſe, and to which they are carried in the Brain; for if they being plentifully confounded with the ſpirits of the brain in its Veſſels, filling up thoſe places and ſeeking paſſage out, together with them they be brought to the ſides, by offering to the ſight, ſuch a ſenſe and motion in things externall they breed a Vertigo as hath been ſaid formerly; lighter or more grievous according as their agitation is greater or leſs

The which alſo doth affect a man alone, if the Vapor be ſubtile and no otherwiſe polluted, or if it be too hot there is joyned alſo a pain of the Head; if it be turbid or ſome other way polluted, coloured, ſhining, as it may diverſly exhale from divers humors and Choler as ſhal be ſaid by and by, then there are cauſed Imaginations alſo with a Vertigo by which there falſly repreſented to the ſight divers ſmall bodies, Inſects, Atoms, Colours, Shinings; or if by their obſcurity rather than thickneſs, as they would have it, they darken the ſight, they caſt Clouds, Fumes, or Darkneſs before the Eyes together with the Vertigo in the ſaid Scotodinos affect for though they ſee nothing, (as formerly hath been ſaid of their Eyes cloſed) yet they may feel a Vertigo.

The which Imaginations notwithſtanding and Obtenebrations or Darkneſſes do oftentimes alſo happen apart without a Vertigo, if that Circumaction of the ſpirits in the Head be not made, but only a mixture of the Vapors with them; the which for what reaſon it can befall the ſight, in ſo great a variety of Opinions concerning this thing, we muſt a little more diligently ſearch out.

Many have beleeved theſe Vapors aſcending and breaking forth of the Chamber of the Eyes which are before the Eyes like a Fume, do either deceive, or hinder the ſight being moved with this reaſon, becauſe they ſaw tears provoked, and the Eyes look red from

Vapors

Vapors which in like manner did penetrate to the Eyes and prick them; yet this seeing it rather comes to pass, from the pricking of the sensible coat of the Nostrils, by reason of its communication with the adnate coat of the Eyes, this comparison will no waies take place; and seeing the vapor, if it did so come under the orbite of the Eyes, and creep about them, it would presently fly forth before it could touch them, we reject this Opinion as weak.

But others have thought that these Vapors do wholly go under the Eyes and penetrate even to their innermost parts so that intrinsecally they are seen by the Eyes, but whenas after this manner there is no passage to the Globe of the Eye, and that is so thick by reason of the horny coat on every side whol, that the Vapors can no waies pass through it, into which a Needle can hardly be thrust, when a Suffusion is to be taken off, this Opinion of some is vain, and by so much the more sooliſh, because they would palliate and cover their errors with the perspirability of our body.

But others that they might explain after what manner these vapors might enter into the Eye, seeing they knew that there was no other entrance into the chamber of the Eye, then of the Optick Nerve, Vein and Artery; they have writ that these Vapors indeed did first assault the Brain, but from thence descended by the Veins and Arteries to the Eye; not understanding what we have deliverd in our Anatomy, that these vessels only run through the adnate coat of the Eye and do no where come neither into the horny coat of the Eye, nor the inner part of the Eye, seeing if blood should enter the Eye, by its colour it would represent all things red unto the sight (as it comes to pass when being poured out of the Vessels it falls upon the Horny coat) for this reason it hath been proved by this demonstration that the Vapors are not carried neither after this manner to the Eyes.

Others more considerately teach that it comes to pass, by reason of the optick Nerve, which they hold to be the chief instrument of sight, the which we also do admit of, yet we grant not that this is done for that reason, as they who have thought that the vapors can enter the optick Nerve and through that as through a pipe are carried from within the Scul even to the Eye; seeing turbid vapors can no waies be carried through the Nerves ful of animal spirit, and seeing this is against the nature of vapors to be carried downwards unless they be driven by some violence (which here is not at all.)

But we rather probably think that it happens thus, to wit, that these vapors assaulting the fore parts of the Brain especially, and being confounded with the animal spirits, there with the brightness of the Images which are offered to the Brain by the optick Nerve, where all sensation and distinction is made, by the mixture of some sparks, by which their light is rendred unequall, or darkned in certain places, they represent to the Brain these like false apparitions confounded with the true Images, in this hurt of Seeing which is called a little Cloud; for that this is done in the Brain and not in the Eyes, the Vertigo which for the most part doth accompany these imaginations as hath been formerly demonstrated, doth sufficiently shew, the spirits then in the Brain being affected and agitated too, whence they that then labor of a Vertigo have not these imaginations, but seem to themselves wholly to be turned about, and a Scotomie or Obtenebration of the sight, that they become almost blind sometimes following these little Clouds, the spirits being then wholly obscured by a multitude of vapors, doth evidently declare it; all which hath been sufficiently demonstrated to happen in that part of the Brain which gives the Original to the optick Nerves, and is higher than the rest, and therfore seems chiefly to prejudice Seeing, but not in the Eyes if it proceed from vapors.

As in an internal fault of the Eyes arising from a Coat growing there, we shal by and by shew, that that these Clouds also, and the other aforesaid may be offered to the sight, and the sight also be wholly obscured, in that called *A Suffusion of the Black of the Eye*; wherefore these little Clouds generated from vapors they have falsly called by the name of a Suffusion because they thought that then also vapors were spred over the Eyes, and did there generate a little skin, which we have more rightly indigitated to be little Clouds, & Imaginations; which also are distinguisht from a true Suffusion by these signs, because in a Cloud & imagination there is no Speck in the Eyes of the affected, these accidents of the sight being objected to both Eyes at once, which do somtimes abate and cease and return again at a certain time, seeing in a true suffusion the fault appearing in one Eye, but scarce perfectly in both at once, it hinders the sight without intermission, as shal be said there.

But the Cause of these Evaporations whence a Vertigo imagination and Scotomie proceed, may consist in divers parts of the body, seeing somtimes vapors raised from the lower parts are sent into the Head, most commonly they proceed from the Stomach; in which a cholerick humor especially, bringing a hot subtile evaporation, and sending it not only into the Nose (as the vapor rising from Onions Radishes, Mustard, is wont only to vellicate the Nostrils and presently again is dissipated) but also into the head it self, sometimes causeth a Vertigo, somtimes Imaginations: which for the most part imitating the nature of Choler, somtimes are yellowish, somtimes green, or blackish: and seeing Choler in the Stomach is most fierce and boyling hot whiles it is empty, and the vapors then being hindred, are the more freely carried upwards, it happens that the said accidents are troublesome to the cholerick whiles they are yet fasting, and that upon the taking of meat, because the vehemancy of Choler is abated and the vapors represt, they grow milder, and at last cease: the which happens also the vapors in the head being discust of their own accord, and so much the sooner by how much they are more subtile, till new evaporations being made, these evils do return; but it is known that this proceeds from Choler, by the bitterness of the mouth and gnawing at the mouth of the stomach, which they call the heart, and by other signs of this humor; which also somtimes brings with the same labor a pain of the Head too, with a Vertigo.

The same vapors proceeding from the Mesaraick Veins in which the cholerick juyces are wont oftentimes to abound, as hath been shewed elsewhere (as by those vapors raised from the same place, and carried upwards by the Veins and Arteries, intermitting Feavers, hypochondriacal Melancholies do invade a man by intervals) so also they oftentimes raise the said symptoms, which is done the vapors being carried upwards from thence through the Veins, and somtimes through the Arteries which are annext to the Mesaraick Veins; then especially when those vapors are subtile, that they induce rather these accidents than Perturbations of the mind which hath been shewed do rather proceed from their malignity the which therefore do somtimes produce Vertigoes only or as they are qualified, Images and Scotomies together with them, or without them; which we had rather alleadg as the truer cause than

pretend

Pretend Crudities, from which Wind rather than these like Vapors are generated.

But also from some other seat of the body these like vapors raised from a thinner blood through the Veins and Arteries may cause the same: as from that part which is about the Womb, as the Courses being stopt this symptom also doth happen; as other also oftentimes upon this account: and from some part of the Foot or of another member a vapor proceeding like to some Air being carried upwards, as we have observed it hath been the Cause of an Epilepsie, so also of a Vertigo, whence somtimes Vertigoes go before an Epilepsie and presage that wil presently follow, when from the like vapors vellicating the Brain, Epilepsies also may be caused, as shal be said in its place.

But the cause of these diseases sometimes consists in the Head it self, in which not only spirituous, hot and plentiful blood collected, may cause the same (as hath been said formerly) but also from humors contained there, the like Vapors raised and mixt with the spirits may produce these accidents; which we do beleeve doth arise rather from the Blood of the Vessels and Ventricles of the Brain, and the humors mixt with it than from flegm, the which also we do not deny to be a cause of the Vertigo, but not because it sends forth vapors, but after this manner now to be explained.

The Fluctuation of a watry flegmatick humor in the Brain is the cause of a Vertigo.

'Tis certain that a Repletion of the Brain caused by a watry humor, as well that Serous as Flegmatick doth cause that Vertigo which is wont to precede and threaten an Apoplexy or Carus; which being frequent and of long continuance unless it be prevented, is wont to terminate in these Diseases with great danger of life; but it doth not this by cooling and moistning the brain, seeing this agitation of the spirits which is in a Vertigo would so rather be hindred than promoted; but this comes to pass, when filling up the windings and spaces of the Brain by its great plenty filling the Skul, and also generating plenty of Wind (which are oftener ingendred from wateriſh humors than Vapors) it waves in it; for then as in the cover of the heart, water abounding doth cause a Palpitation of the heart, when it is stirred; so here also, it every where filling the Brain when the Head is moved, the humor being stirred and following the motion of the Head, as we have said of the spirits, it gives such a sense to the head; which doth sufficiently appear by their relation, who complain of such a fluctuation, and the Skul being opened, we have often found an immense plenty of this humor, as hath been said in an Apoplexy, and in him in whom even now we said that the Arteries too were grown hard, we have found so great plenty of it, that the Skul being opened it hath come forth by floods, the which together with that obstruction of the Arteries, producing a double cause of the Vertigo, made it so lasting and incurable, in which that humor for continuance watring the Brain, had bred that Carus of which he died. But it is known that this is the cause of a Vertigo not only from that sense of fluctuation, but also from other signs of flegm abounding, explained in a Carus and Apoplexy, to which those that are prone become at once sleepy and more stupid, and at last fall into these Diseases unless prevented.

The Visory or Net-like Nerve in the Eye is the cause of the hurt of seeing.

By occasion of the Visory Nerve implanted into the Eye and dilated like the form of a Net, most discommodities of the sight do happen, seeing that is the principal Organ of seeing; and that for the most part by consent of other parts, when by reason of them it is disappointed of those things which are required to Seeing, viz. the spirit and the proper object, or else it cannot rightly enjoy them, for otherwise being immersed in the Eye 'tis so grounded, that 'tis scarcely troubled with any disease, unless by consent of the Brain.

A Privation of the animal spirit in the Net-like Nerve is cause of Blindness or darkness of sight.

It is disappointed of the Animal spirit either altogether in blindness, or in part in a weakness of the sight, by reason of the Optick Nerve, such as are Distemper, Compression, Hurts, and Weakness proceeding rather from the defect of spirits, than that fansied thickness and subtlty of them.

The same happens also, the spirits flying from the visory Nerve towards their beginning: in the Eye prest a long time, and by consequence the Net-like Nerve by reason of humors filling up the Eye, it sometimes happens that they are afterwards so long blind til the spirits return again.

And also the spirits being too much idle in the visory Nerve and as it were laid asleep, or being retreated when there is no use of them, the Nerve it self being made dull, in those who being kept in darkness for a long time, as in Prison or other dark places, have seen nothing for a long time, when they return into the light, they scarce recover their sight, or slowly, or never any more.

And seeing the Animal spirit hath a constant need of the vital, this by swooning being for a while dissipated, and the Animal spirit being hindred by consent, amongst the cessations of functions, the Seeing first of all is darkned in those that swound, and by and by it is taken away with all the rest so long till they come to themselves.

A Privation of the Object in the Net-like Nerve is the cause blindness or dark sight.

By reason of the proper Object, viz. the Images of things entring the Eye by light and brightness; the Net-like Nerve suffers a hurt of seeing if it be offered to it too violently and it be so affected with it, that afterwards it perceives no more, or not rightly.

As when one very much strucken with the brightness of the Sun, Lightning, Fire, afterwards thinks that he sees sparks for a while, and either their Eyes are altogether blinded for some time, or as it often happens, they afterwards continue blind.

'Or if the Eye be destitute of light by which the things ought extrinsecally to be illuminated, and the Eye intrinsecally that it may see; by reason of the external darkness, it cannot know the species of things.

Which also how they happen by reason of the stoppage of the black of the Eye, we shall explain in the faults of the Membranes of the Eye, as also when it happens by reason of humors, it shall be said there.

The humors of the Eye the cause of hurt of sight.

Likewise an Impediment in the sight may happen, by reason of humors contained in the Eye, especially of the Chrystalline, through which as through a Spectacle, the Net-like Nerve doth first collect the Images of external things, and again receives in its cavity, those dispersed, dilated, & made bigger, to which Chrystalline humor the other humors are servants only, and this comes to pass, when either they fail because either they have flown forth, or are wasted; or when they change their natural scituation,

on, or their ſubſtance is changed, or they are infected with a ſtrange color, which how it may be done we ſhal explain in the particulars.

A flowing forth of the humors of the Eye, is the cauſe of blindneſs.

And ſomtimes the humors flow forth of the Eyes more commonly the watry one ſeeing it is placed in the fore part, and is more fluid, the others ſeldom unleſs the cauſe be great, and then Blindeſs is cauſed; for the watry humor being flowed forth, the Globe of the Eye is ſomwhat fallen together and wrinkled; whence the hole of the black which ought to let in the light, is ſhut up; and the reſt of the humors falling forwards out of the cavity of the Net-like Nerve, do cauſe that that doth ſomwhat fall together, whence it muſt needs be that ſeeing doth ceaſe; and by much the more if the Chryſtalline humor doth fall forth with the glaſſie, in which it inheres, ſeeing that (as hath been ſaid) is altogether requiſite to ſeeing and then the Net-like Nerve being wholly fallen together, can no longer comprehend the ſpecies of things in its cavities.

Of all which the apparent Cauſe is wont to be a Wound or Ulcer of the Eye; if a large wound being made 'tis open'd through the horny coat ſo thick and hard; for by a light puncture with which they are wont to perforate the Globe of the Eye in takeing off a Cataract, the watry humor which hath its tenacity alſo, cannot flow forth,: and I have ſomtimes ſeen that an abſceſs of the Eye hath been generated from an Inflammation alſo, in which part of the horny coat is converted into matter, which being broke, it ſomtimes pours forth the humors of the Eyes with the matter; and I have obſerved in a peſtilent Feaver that it hath hapend in both Eyes, the Cryſtalline humor flowing down to the Beard, and ſticking there.

A Conſumption of the watry humor is the cauſe of Blindneſs or Darkneſs.

The Humors of the Eye alſo are waſted eſpecially the glaſſie ſeeing it is thinner; and then the Eye not being ſufficiently diſtended (which is required that the black may remain exactly open) but ſomewhat fallen together, the hole of the apple of the Eye although not wholly ſhut up, yet looſing its largeneſs or roundneſs, and the ſituation of the reſt of the humors being troubled by the way there follows a weakneſs of the ſight, or if the confuſion be greater, Blindneſs: as in long acute Diſeaſes waſting the body with a high and long continued pining it happens to ſome more rarely, but more frequently in extream old age, in which both the glaſſie and cryſtalline humor may be dried up, as ſhall be ſaid by and by; whoſe Eyes appear ſomwhat wrinkled, which the vulgar therfore are wont to call Crackt, eſpecially when in the Agony of Death being now deſtitute of heat and ſpirits they flag.

A Perverting of the natural ſituation of humors, the Chryſtalline and glaſſie (which ſeeing they are more ſolid, being reſtrained by their proper membranes they ought to ſtick fixt in their proper place) doth alſo bring hurt to the ſight whoſe places being changed, the watry humor filling up the ſpace left by them eaſily gives place.

The perverſion of the ſituation of the glaſſie humor is the cauſe of error.

The which ſomtimes happens in the glaſſie humor (to which the cryſtalline humor is ſet over, and a little way immerſt in its former part) if the ſame part of it carried forward be ſet before the cryſtalline humor; where alſo being oftentimes contained, it may be ſeen lie a white Speck under the apple of the Eye, for then it is not neceſſary that blindneſs do yet happen, ſeeing the humor is bright as Glaſs, but ſome Error; ſeeing it is thicker than the watry humor, as it is wont to come to paſs in a Suffuſion beginning, as ſhall be ſaid: unleſs perhaps ſo great a quantity of it be fallen thither, that it wholly obliterates the cryſtalline humor, and preſſes it backwards, or very much inverts it, for then both humors being troubled, more grievous accidents of the ſight are wont to follow, as ſhal be ſaid in the cryſtalline humor; but the cauſe of this may be a blow, or Contuſion, or more frequently a puncture in couching a Catarract, being forced too deep to theſe humors, and breaking their thin membranes to which they cohere: for otherwiſe ſcarce as they would have it, can a great ſtraining by holding of the breath in going to ſtool, in Labor, or Convulſions in which the Eyes appear as if they were thruſt forth, cauſe that intrinſecally in the Eye.

The Cryſtalline humor being eſpecially hanged like a Sun in the middle of the Cavity of the glaſſie humor, ſomwhat diſtant from the hole of the apple of the Eye looking directly on that with its bulk, and receiving the light through that equally diſperſt into it, and diffuſing it to the cavity of the viſory Nerve, or the Net-like ſemiglobular, placed in the hinder part of it, ſo that it fils it every where with its brightneſs, if it doth very much change this natural ſituation, it cannot be done without hurt of the ſight; which faults of it, ſeeing the humor it ſelf cannot be ſeen in the Eye, are no waies conſpicuous in it, unleſs it wholly fall into the apple of the Eye, as hath been ſaid of the glaſſie humor.

The ſituation of the cryſtalline humor inverted or departing from the middle to the ſides is the cauſe of error and ſtrabiſm.

But this comes to paſs, if being in ſome manner inverted by its broader part which is flat like a great Lentil, it is not rightly oppoſed to the hole of the apple but declining a little to the ſide it looks on it obliquely or tranſverſly; or when being carried upwards or downwards or to the ſides from the middle ſeat of the Eye, it doth ſomwhat decline from the aſpect of the hole of the Apple; the which happening either from the birth in ſome, in others from ſome violent cauſe, as was ſaid even now in the glaſſie humor, it happens that either blindneſs is cauſed, if the receſs be great from the natural ſituation, or if it be leſs an obſcurity of the ſight or rather ſome Error in which things ſeem to be either double, or crooked, or bent: moreover ſome light declination only of the cryſtalline humor from the center of the apple although yet it doth little hurt the Sight may be the cauſe of Squinting; for as in Seeing if the cryſtalline humor be rightly oppoſite to the hole of the Apple, the Apple alſo doth directly look upon the external things which it beholdeth, ſo if the cryſtalline humor be a little turned from the center of it, that they ſee with the apple not rightly but obliquely oppoſite to the things, thoſe troubled with a Squinting do ſo invert the Eye, that they are judged to look upon ſomwhat elſe, than the thing objected; the which notwithſtanding may happen alſo by reaſon of the contorted ſituation of the apple as ſhal be ſaid by and by, which things do thus befall men for the moſt part from their birth.

The ſituation of the cryſtalline humor drawn backwards or forwards is the cauſe of that ſight, in which they ſee not things unleſs very neer or things diſtant better than neer.

But eſpecially if the cryſtalline humor have its ſeat a little in the hinder part of the Eye towards the Netlike nerve it is the cauſe of this ſight

sight in which they cannot rightly discern things more distant, the which happens to many from *their Birth*, that the Crystalline Humor doth not reside more towards the fore parts at the Apple, as it is naturally wont to do, but hath its Scituation exactly in the middle of the Eye, and it is so common, that Anatomists for the most part have described its Natural Scituation in the midst of the Center of the Eye; whence it is no wonder that this sight which we have called *the youthful*, doth befal many from their *Birth*, that they can discern things neere rightly and acutely, but not things distant, and that when *the Spectacle* is too much inclined backwards from the things which we behold, which therefore will be sufficiently illustrated only with those neerer, but from those Images objected at a distance, unless being collected by the Mediation *of a thick Spectacle made of Crystal* they be so offered to the Eye more effectually, they cannot sufficiently illustrate that: And hence it happens that seeing *the Scituation* of it doth so continue, this *seeing* is no waies altered the whol course of life, unless this be from some other Causes.

And also if it *be yet more removed from the middle of the Eye towards the hinder parts*, they are forced yet to apply *far neerer to their Eyes, the things* which they would see, and use *a thicker Spectacle*: the which yet is not very common, and happens only in them, which we have said are called *Myopes* or Purblind.

Which *truer Causes*, which happen by reason *of the Instrument vitiated*, and therefore may be corrected by another Instrument to wit *a Spectacle*, he had rather alledg then to refer them *to the Spirits*, which in those young Folkes, with whom this fault is familiar, and who see most acutely things neer, are neither defective nor changed, because they may be mended by a Spectacle.

And also *for the contrary Cause, after a different manner*, there ariseth *an Impediment of the sight*, to wit when *the crystalline Humor from the said Natural Seat doth more* incline *forwards, towards the Apple*, for then *with a greater discommodity* they *less* see *things neer* but the same *removed* far *from the Eye*, they behold *more rightly*, unless they correct this defect, by applying *a thin Glass Spectacle*, which as it performing the place of *the Crystalline Humor* and receaving and differing the Images of things, and through the Crystalline representing them greater to the Eye, and therefore they have alwaies need of *a Spectacle* to read and see acutely; the which happens to most people *growing old*, to some *sooner*, to others *later*, not by reason of the defect of *Spirits* as they have thought, seeing so there would follow rather a weakness of the sight, as also of the other Senses, which a Spectacle could no waies mend, nor suggest new Spirits; but because by that *bowing down of the Head* which the whol time of our age we must needs cast down our Eyes, in reading, and in what Business soever proposed to our Eyes, and acted by our Hands, *the Crystal Humor by process of age together with the glassy* is carried *by degrees to the fore parts*, and at length subsisting there, brings this *defect to the sight*, especially if in them also, *the watry Humor* being somwhat *wasted* nothing do resist it, and *the glassy Humor lying upon it*, do more strongly depress it; which *defect* and a far more *grievous*, *Blindness* or *Weakness of the sight* do follow, if *the crystalline Humor* wholly *falling down to the Apple*, be manifestly seen to stick there, and to stop up the Eye: which is wont to be more frequently the Cause of the hurt of seeing, in Horses and other Creatures, which go with their faces downwards: the which as it happens by degrees *by reason of age*, so sometimes *suddenly after a Blow*.

The hardning of the crystalline Humor is the cause of defect of sight.

The substance of the Humors of the Eye changed doth also bring *a fault in the sight*, as it comes to pass, if *the Crystalline Humor* be too much hardened, as it may happen either by reason *of age* or *other Causes*, but with which, not unless the Body be vehemently & a long time dryed; and then because it looseth its *Transparentness* either *in part* or *wholly* (as it appears being boyled) *it is the Cause of Blindness or Dulness of sight*, which as in *that* so also it may happen after the same manner in *the glassy Humor*.

The Obscurity of the crystalline humor is the cause of a Nyctalopy.

But if yet by its *Natural Constitution* or *progress of age*, it become *more solid* or *obscure*, because then it hath need of a greater light that it may be illuminated, it comes to pass that they cannot see perfectly but by a ful light, and when that fails, though it doth a little clear, with the splendor of light, yet they see not rightly, and thence follows the said *Nyctalopy*.

A Tenacity of the watry humor is the cause of want of sight in a suffusion

But that is the *watrish Humor* whose substance is more easily changed, seeing it is wont oftentimes to acquire *a Tenacity* by which *by degrees growing to the hole of the Apple, and at length drawn out and turned into a skin* by breeding *Clouds* first, and afterwards *a Suffusion*, it makes blind: which fault being very common, and to be seen outwards also, shall be explained in the *grapy Coat*.

A discolouring of the crystalline Humor breeding error.

The Humors are scarce infected with *a strange Colour*, seeing no veins or other vessels carrying the humors do enter into the inward parts of the Eye, or touch its Humors: the which notwithstanding they have delivered doth sometimes come to pass from the moistures of the Eye, in *the Crystalline Humor*, and that as also *the glassie humor* is dyed with *a grayish colour*, and therefore they have called it *Glaucoma*, and they have writ that the sight is then vitiated, as if they saw thorough a Cloud; when notwithstanding the Ancients made *a Glaucoma* the same disease, with *a Suffusion*, then especially calling that so, when the Skin being not yet well confirmed, it appeared to the Beholders like a thick Glass, of a greenish, or azure Colour, and was not yet white.

The Membranes or Globe of the eye are the cause of the hurt of sight.

The sight is hurt *by reason of the Membranes constituting the Globe of the Eye*, if *that* do consist *in that part* which appears *darkish* or *black by reason of the Apple* or *Hole* opening the inward Chamber of the Eye *which is black* and *opacous*, which *Hole* seeing it doth transmit the outward light into the inward part of the Eye thorough *a transparent* Horn spread over it, if it *be so obliterated in any part that the Passage of the light into the Eye* is hindered, it must needs hinder *the sight*; the which happens either *by reason of the outward thick Membrane*, bestowing a Horn on the Eye, or of the *grapy Coat* under it, *that makes the Hole, those* giving occasion for this thing either *severally* or *jointly*.

The shutting the eye is the cause of the sight taken away.

This happens by reason *of both Membranes*, if an *Impediment* be objected *out of the Eye*, which may interrupt the light, that it cannot come to the seat of the Eye to which it ought, as it is wont to come to pass the Eye-brows being shut, with the Hands and other things.

A Perversion of the Apple or black appearing in the Eye is the Cause of squinting.

But from this *following fault* also that may happen, if the *seat of the Eye which is pervious and transparent* is hindered *by the Neighbouring parts* that *seeing* cannot rightly be performed; as it comes to pass if *the Apple* be not placed in every fore part of the Globe of the Eye, bare and in that middle, but *declining* from it, is more to *the sides of the Eye*, which befalls some from their *Birth* in *a squinting* in one side of those Eyes, for that re-

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ſon there appears more white; ſo that every one by that may know that they look a ſquint: and becauſe when they would look upon things, wreathing the Eye that they may oppoſe the apple right to the things, they make ſuch a ſtern aſpect.

Although this may happen alſo, the apple conſiſting in its natural place, by Convulſion of the Muſcles of the Eye, the Eye drawn ſomwhat to one ſide and ſo inverted that the apple do rather look that way; whence it comes to paſs, that when they would look upon any thing would direct the apple to it, either they bend their head aſide, or draw back their Eyes by the oppoſite ſound Muſcles, that the apple may be reduced again ſome way to the fore parts: as they alſo whoſe eyes have a natural ſituation after this manner drawing them aſide purpoſely, can expreſs the eyes and looks of Squinting, which Convulſion unleſs it befalls the eyes in a true Convulſion of the whole body, to wit, an Epilepſie, in which they ſhew the like aſpect, for the moſt part it befalls the Squinters from their birth; the Muſcles being ſomewhat contracted rather, then convelled, and continuing in that ſituation. And that hath been explained by others to be the only cauſe of Squinting, when notwithſtanding that very thing as hath been ſaid may come to paſs, the apple being impreſt on one ſide and the cryſtalline humor being removed out of its natural place that they behold things by diſtorting their eyes after the like manner: all which notwithſtanding do hurt the ſight only on this account, that the Eye being left in its ſeat, they ſee thoſe things rather which they meet with ſidewaies, then thoſe which are placed before their face, til the Eye being reduced ſo far, that 'tis oppoſed to the things placed right before the eyes, they behold them alſo.

A perverſion of the apple, the cauſe of a wonderful affect in the ſight.

But this rare and memorable thing befell one from a wound made neer the inner Angle of the Eye by which the Globe of the eye was ſo inverted, that the apple being brought even to the great corner, and covered with the Skin of the wound healed, he was forced to ſee through the cavity of his Noſe, and he could ſee, nothing any more, unleſs through the hollow of his Noſe as through a pipe, whence he muſt needs direct his Noſe to that, which he would ſee, which by the relation of men worthy to be beleeved, is apparent was done in our time.

The private faults of the horny coat, do then prejudice the ſight, when they poſſeſs that part of it which is ſet over the apple like glaſs or a tranſparent horn and either only ſtick there or are diſperſed further through the white of the eye; which then may be manifeſtly ſeen and known when it is ſpotted or covered.

This diaphanous ſeat of the horny coat being ſteined with a ſtrange color, ſo that it is not any more bright and cleer, but obſcure and colored, it either ſtops the brightneſs which in ſeeing ought to enter into the Eye, like a foul glaſs which lets in the light, or offers ſomething falſe to the ſight.

An obſcurity of that tranſparent ſeat of the horny coat, ariſing from an obſcure color or white Speck of it in darkneſs, Albugo, a Skar, is the cauſe of want of ſight.

And this chiefly comes to paſs, if it be infected with an obſcure or white color with which ſomtimes the whol ſeat of the horny coat appears changed, and brings the ſaid darkneſs eſpecially in old men, to whom this chiefly happens; but if that only in ſome part of it ſuch a white ſpeck do grow it is called *Albugo*; in which fault if the ſpeck be perfectly white and ſpred over the whol region of the apple, there ariſeth blindneſs; but if it firſt begin to grow white, it darkens the ſight as if it were hindred with a Cloud drawn over it, or if it comprehend a little ſpace of the apple, or from that incline more to the Circle, it breeds a certain error in the ſight.

But ſuch an Obfuſcation or whiteneſs of the horny coat ariſeth either from the drineſs and hardneſs of the whol horny coat: or if there be only a ſpeck from the drineſs and and in duration of that part only which is ſeen white. For as we ſee other things which are tranſparent as the white of an Egg and the cryſtalline humor in the Eyes of creatures being dried by boyling do become white and loſe their tranſparency, ſo it happens here to the horney coat that by old age in which the membranes are wont to be dried, or by a diſeaſe of the eyes after Ophthalmies, Epiphories either it being wholly dried up, or drineſs being left only in certain places of it, it doth allor in part become white; the which alſo we may ſee ſomtimes come to paſs from the thicker part of the nouriſhment with which it is nouriſhed, being carried thither, and remaining there, and leaving a white Speck, as in the Nails, which in the like manner are marked with white ſpecks ſomtimes are ſuperficial, and other times being more deeply imperinted they penetare the whol horny coat.

And alſo from a Wound or Ulcers of the eyes eſpecially after the ſmal pox in Infants, a Skar or Callus being left, higher ſomtimes deeper and thick for the moſt part cauſeth ſuch a white Speck in the white of the Eye, ſomtimes large ſomtimes oblong which is called a Skar, which doth obliterate the ſight either wholly or in part, or if it be long and narrow, it cuts it in two as it were and divides it.

A red or yellow diſcoloring of the bright part of the horny coat is the cauſe of error.

Beſides theſe diſcoloring of the horny coat we meet with red ſpecks or ſomtimes yellow, from blood ruſhing from a blow of the Eye, or from an infuſion of choler in thoſe troubled with the Jaundiſe, but for the moſt part appearing only in the white part of this coat, which the adnate coat carrying the veſſels doth only inveſt, and then they do not prejudice the ſight. But if they reach ſo far as to the bright part of the horny coat (where oftentimes a red ſpeck is conſpicuous a long while, the blood perſiſting in the ſubſtance of the horny coat without corrupting, as it were an inſect in Amber) they repreſent to the ſight the ſame color, either red, or yellow in all the Images the Eye ſeeth.

The horny coat being coverd by a little Skin or Ungula is the cauſe of blindneſs.

The ſame tranſparent part of the horny coat is extrinſecally inveſted with a new coat growing to it; which ſomtimes wholly growing to it grows in one, or adheres to it without any connexion, unleſs where it ariſeth, and in the compaſs, on the other part 'tis only ſpred over; ſomtimes proceeding from the greater corner of the Eye, and ſomtimes from the leſs, and being firſt ſpread over the white of the Eye by and by it covers the black of it, either in part or all: and it is at firſt thinner then growing thicker it becomes fleſhy interweaved with many bloody veins and 'tis called a Pannicle. And oftentimes it is ſo augmented that it may be laid hold on by the fingers, and a little way be elevated from the Eye: and ſomtimes a part of it hath been cut off, that hath weighed two ounces. But at other times being hardened it grows white and then it is called *Ungula*, *Unguis*, *Pterygium*, *Zebel*, putting out the

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ſight wholy or in part, as it occupies the Black of it more or leſs.

The which growing out either from a Spontaneous afflux of Blood, or after Exulcerations tis called a *Hyperſarcoſis* or *Chymoſis*: otherwiſe from a private fault offenſive eſpecially to the Membranes, it very often befals the Elephantiacal as ſhall be explained there, otherwiſe ſeldom betiding man: as I have often ſeen it befal Fiſhes if they be kept a long time in Fiſh ponds in foul water, the mud growing to them and blinding them. Somtimes the ſaid *Unguis* grows from the Superficies of the horny coat corroded, when part of that nouriſhment then breathing forth, doth concrete into a matter like unto that which reſembles a Horne or Nail, only tis not tranſparent; as the Perioſtia of the Bones being corroded we have ſaid elſewhere that Knobs are generated, and from the Skin wounded, Skars, from the Juyce that was wont to nouriſh them.

The faults of the grapy Membrane hurt the ſight, when its hole, which they call the Apple, being pervious in that part of the Grapy coat which lies under the horny coate, yet no waies grows to it, and letting in that light into the Eye, is either ſtopt up with ſome humor, or filth, or is Contracted, or Dilated: all which may be ſeen and known, Extrinſecally alſo in the Back of the Eye and its compaſs, whenas the horny coat which is ſeated over it, is tranſparent, although the hurt lie under it.

An obſtruction of the hole of the Grapy coat or the Apple from the proper Humors of the Eye is the cauſe of Error in ſight.

Somtimes this hole is ſtopt by a Humor and the Paſſage for the ſight is intercepted; and this come to paſs ſomtimes from the proper humors of the Eye the Cryſtalline and glaſſy falling into it; as from the change of the Scituation of the Humors as hath been ſaid, and from the too great largneſs of the Apple as ſhall be ſaid, it may come to paſs, and the ſight may be ſo hindred; which is ſeen then alſo when it appears lik an Albugo, in that ſeat of the Eye.

An obſtruction of the Apple from Blood and matter in a Hypoſphagma and Hypopion is the Cauſe of Error or defect in the ſight.

The ſame may come to paſs from blood infuſed by a blow not only into the horny coat as hath been ſaid before, but alſo penetrating even unto this empty ſpace, between the Horny and Grapy coat, and filling up that either wholy or in part, and ſtopping up the Apple, which being red at the firſt, but then growing livid, by and by blackiſh, it appears that it lies there (becauſe blood infuſed into the ſpaces of the Body is preſently corrupted, otherwiſe then when the horny coat drinks it up, where without any change it perſiſts red oftentimes for a long while, as hath been ſaid) and then it either depraves or darkens the ſight: more or leſs, as it Poſſeſſes a little or the whol ſpace and tis properly called *Hypoſphagma*, a ſugillation of the Eye.

The ſight alſo may be hindered by matter collected in that ſeat, and then that Diſeaſe is called *Pyoſis*, in which if the matter collected plentifully do ſeem to poſſeſs all the black of the Eye, or to fill up the whole ſpace of the Circle, and to ſhine thorough the Horny Coat, it is called *Hypopios*; but if a ſmall portion of that ſaid ſeat do ſeem onely to ſhine through like the pairing of a Nail, it is called *Onyx* or *Unguis*, the Nail.

The Cauſe of the collection of which Matter for the moſt part is wont to be, Blood fallen into the Eye, as hath been ſaid, and at length converted into Matter; or an Inflammation of the Eye going before, and leaving an abſceſs behind it, not that, in which the horny Coat is corrupted too, and being broke it pours forth the humors of the Eyes, as hath been ſaid formerly, but in which the Blood being diſcuſt after an Inflamation, or External cauſe: this collection of matter alſo is ſomtimes cauſed after pains of the Head; which when it comes to paſs, tis probable this was done, by the watry humor ſo ſuppurated and ripend, as we have elſe where ſhown, that matter may be generated by the like humors; becauſe the Blood otherwiſe can ſcarce be brought hither, unleſs the horny coat be contuſed by violence, the Veins as hath been ſaid, no waies reaching thither.

A Tenacious ſnivel ſticking in the compaſs of this hole, or on the brink of the Apple, and ſpred over it, and by degrees thickening, for the moſt part only in one Eye although the other ſomtimes alſo doth preſently begin to be affected in like manner, the ſeeing doth moſt commonly ſuffer a Blemiſh; and, becauſe it is ſuffuſed or poured out on the Apple, it is called Suffuſion, Hypochyma: which at the beginning ſeeing it is yet a tranſparent ſnivel and doth tranſmit the Light, yet by reaſon of its thickneſs it breeds an Impediment and Error in the Sight, as if it were darkned with a Cloud ſpread over it, and things were ſeen with many Atomes flying as hath been ſaid, whence then it is called Imagination and a little Cloud, as hath been ſhewn: and this is not yet wel conſpicuous in the Eye, but that the black of it, which they cal the Star, doth not appear exactly black as it ought to be wholly black, but ſomwhat troubled; by which alſo, if this be ſeen only in the Eye, the other being yet pure, it is diſtinguiſhed from that Imagination and Clouds which by reaſon of Vapors offer themſelves to the Eye almoſt in the like manner, except that they do affect both Eyes equally.

An obſtruction of the Apple by ſnivel at length concreting into a Skin, called a ſuffuſion is the cauſe of want of Sight.

But at laſt that Snivel by degrees being more and more thickned and looſing its perſpicuity, is eaſier known by the ſight, and doth commonly manifeſt it ſelf, by a grey or aſh Colour, as the Oculiſts call it, and ſomwhat blotting out the black of the Eye, then alſo it doth more offend the ſight: becauſe when it is yet more ſoft and watriſh, it cannot yet be depreſt with a Needle, as ſhall be ſaid; which the ancients have named *Glaucoma*, from the grey colour which is a fault of the Cryſtalline Humor, and becauſe the Cryſtalline Humor being dyed with this Color doth carry before it a ſhew of an immature Suffuſion, ſome not knowing that, have made a Glaucoma properly called, the ſame with a Suffuſion.

But laſt of all, the forementioned Snivel, being wholly incraſſated and made white as we have formerly ſaid that bright things by drying do becom white, and looſe all their perſpecuity, ſo it happens here alſo, and then the ſight being wholly taken away, a perfect Blindneſs follows: unleſs by chance as I have often ſeen, a very little of the black do ſtill appear pointing or circularly in ſome part of it, or in its Compaſs, thorough which the Sparks of a little Light, do ſtill illuſtrate the Eye with an obſcure Light, by which notwithſtanding they can judg rightly of nothing; and this is called a confirmed Suffuſion, which they are wont to call ripe, if ſo be it can be exactly ſeen, becauſe then firſt of all the Chyrurgion may take it in hand; and they commonly call it a ſmall Skin and Web, becauſe being ſpread before the Apple like a Coat it intercepts the Light: not unlike in Colour and Tenacity to the skin grow-

ing to the white of an Egg that is boyled; and though of it self it seems to be of no moment, yet it is wont to bring so great calamity to many men in the loss of their sight.

They refer the cause of this snivel growing to the apple to the rising of a Vapor, or influxion of a humor, but it hath been shewed formerly that from a Vapor this Suffusion is not caused, but those simply called Imaginations, and how that comes to pass, and truly it were the work of a man too much at leisure, to confute with many words so vain an opinion.

But all the rest do think that it is caused by an influx of humor, and do vainly apply all their care to turn away this, as shal be explained, and therefore they foolishly call this affect a Catarhact, others a discent of waters into the Eyes; the which notwithstanding can be proved by no reason, nor shown by demonstration. For first of all if it were caused from an afflux of water or humor into the globe of the Eye, not only this small matter would grow, and scarce as big as a Lentil, but the whol Globe of the Eye would be distended, and swell as it were Hydropical; besides that there is found no empty space in the Eye which can admit this water, seeing it is all every where so filled and distended with its proper humors bred there from the birth, that there is not room for one strange drop, or can the horny coat by any means be distended or dilated more: and then by what way I pray, shal this water flow into the Eye, when that cannot be through Veins and Arteries which as hath been declared formerly, do no waies enter the inward parts of the Eye: but they say this comes to pass through the Optick Nerve, an excellent shift indeed, to hold so noble a part fit to conveigh these excrements, through which nothing can pass besides the æthereal animal spirit. But grant that humor doth descend through this Nerve, How I pray can it be the hole of the Apple? when neither the Net-like Nerve can come to admit it into its cavity, which is wholly filled with the glassie humor, neither can it pass through the Grapy Coat which every where about grows transversly to the horny Coat with browy processes: the which certainly, they who do patronize such like opinions, contesting with sense and reason, if that the fabrick of the Eye were throughly known and perceived by them, with that dilgence as is meet, they ought first to consider and rather to search out the true waies through which the humors may be carried, than being ignorant of the proper causes of Diseases alwaies to fly to that common refuge of Ignorance, Defluxions, and I know not what transpirability of the body.

But we having throughly searcht into these things a long time and much, and by long observation having more neerly contemplated innumerable suffusions and their beginning, encrease, and pricking, we have found that the cause of this snivel doth proceed, from the watry humor acquiring some tenacity: for that as hath been said formerly in the explication of that and other humors) seeing from the birth it is more tenacious (for we have seen also oftentimes that those new born have brought this fault with them into the world, or it hath presently followed upon them) either being dried by process of age, in old age, in which it often happens; or arising from very hot Diseases after Burning Feavers or Inflammations of the Eyes or from a vehement external heat in those who perform most business sitting by the fire and looking upon it; or the watry humor being thickened by the use of Collyries too hot & drying, and being made more viscous as hath been said, by degrees it grows to the brink of the membran: of this hole which it continually washes, and by little and little thickening in that part where it stops up the hole, as we see the said Skin grows on Frumenty, for that reason as it hath been shewed being hardened it looseth its brightness, and successively but in a long time being converted into a Skin it takes away the sight: which if it be depresst, as shal be afterwards explained, the remaining portion of the watry humor, on whose superficies it grew, being yet transparent, the Sight presently returns, but if that also by much drying hath already lost its brightness, as most commonly it happens, although the superficies of it be taken off, nevertheless they remain blind, and by reason of that the Oculists labor wil be in vain.

The narrowness of the Apple is the cause of a Nyctalopy.

The too much narrowing or Immination, as they call it, of that hole in the Grapy Coat wich is called the Apple, doth scarce take away the Sight, when even thorugh the narrowest hole the light may enter the Eye, and illuminate it, as much as is sufficient for seeing; whence we have observed that those, who from their birth have happened to have a very small Apple, nevertheless do see as acutely, as those that have it large, may sometimes more acutely, and things more distant: and as we can behold the Sun through a little hole with less offence to the Eye, so they are less offended than others, by an external brightness and great light; of which seeing they have a more abundant need to see wel, beyond others; it comes to pass that a little before night, or darkness somwhat growing on, they see lets, than by a ful light, & this is the chief cause of that Nyctalopie in which they see not sufficiently, by a sleight brightness of the Moon, Stars, or light set up: although this also as hath been formerly explained, may happen by reason of an obscuration of the horny coat or humors, because then also they have need of a greater light, that they may be illuminated, neither is a smal Apple observed in all those that are Nyctalopous or cannot see in the Night.

Which as it is born with some, so it can scarce come to pass, as some teach, that by reason of the spirits distending the Eye, or so great drinefs of the Globe of the Eye, that by that means the Apple may wholly fall together; as somtimes it happens from a wound of the Eye, the humors flowing forth, and the coats falling together, they become wholly blind, as hath been declared formerly.

A Dilatation of the Apple or a Mydriasis is the cause of an evening sight.

A Dilatation of the Apple called *Mydriasis* by shedding plenty of light into the Eye, hinders the cleerness of the sight, darkening it with too much brightness; and if the enlarging of it be great, in a light somwhat more obscure and darkish they see more rightly than in that too much shining, and that by reason of the internal brightness of the Eye, sufficiently illuminating the Air for seeing: as we have had an example of this rare disease, in a certain Foundling living in our Hospital the year 1625. who by day time, and in presence of light was blind, but by night and in the dark, did see the smalleſt things; hence we have observed that amongst Birds, the Owls; and amongst Animals the Cat which also do see by night, can by twinckling contract the hole of the Apple, and of their own accord dilate it again, and so streighten it at the brightness of the Light, or a Candle, that only an oblong black cleft doth appear, but by night and in the dark, dilate it so, that the whol former region of the Circle seems black, and for that cause Owls also receive obscure Images, with a very

open

open Eye, and in the day time, that they may not be hurt by them too much appearing, they joyn them again, and covet darkneſs. For otherwiſe this largeneſs or narrowneſs of the Apple, makes little for the ſeeing things diſtant, better, or leſs, as ſome have thought; ſeeing theſe defects of ſeeing which we have called the yong & old mens Sights, may happen as we have often obſerved, both to thoſe endued with a long and a narrow Apple, and what I have obſerved in many, and in my ſelf, that though the Apple of one Eye be far larger in the ſame man, than that of the other Eye, yet the ſeeing is alike in both Eyes; neither could we obſerve yet, that though ſuch a dilatation of the Apple do happen, the things which are ſeen ſhould be repreſented leſs than they are, as ſome have been opinionated.

But for the moſt part this dilatation of the Apple befalls certain living Creatures from the birth, as thoſe for which it was convenient to ſee by night; and unleſs it altogether exceed a mean, otherwiſe than hath been ſaid, it doth no waies prejudice the ſeeing, but rather ſeems to bring ſome benefit, as one hath declared unto me; who ſeeing he had a moſt large Eye-ball, he could comprehend and know by his ſight without moving his head, not only thoſe things which were before his face, but thoſe things which were far apart on one ſide, which could not be ſeen by others, unleſs by bending the head that waies; the which I did ſo much the eaſier beleeve him telling me, ſeeing this hath happened to me my ſelf in my youth, and at one look at the Table I was able to ſee at once many ſitting round about, and to take notice of their geſtures; but if that by a wound or ſome other hurt, the apple of the eye be rather dilacerated than dilated, than upon that account, becauſe the humors are too much carried to the foreparts, as hath been formerly expounded, it ſooner offends the ſight than it can bring a change after that manner as hath been ſaid; from influx of humors as they have thought, it hath already been declared that it cannot come to paſs; but from a vehement impulſe of of the ſpirits by ſtraining, if the eye being dilated, the apple alſo were inlarged, yet the ſame ceaſing it would by and by return to its natural largeneſs.

The Cure.

The Cure of all theſe hurts of ſight, viz. of Blindneſs, an Amblyopy, of that which we have called the old and young mans ſight of a *Myopie*, *Nyctalopie*, evening ſight, of Error, Images, a *Scotoma*, *Vertigo* and the reſt, is ordered in relation to the cauſe, which is, as hath been ſaid either in the Brain, the affects of that bringing hurt not only to the ſight, but alſo to other Senſes; or privately and chiefly prejudicing the ſight, to wit, a Hurt, Contuſion, Drineſs, Refrigeration, Agitation and trouble of the ſpirits, or a repletion from a watery humor; or it is an affect of the Net-like Nerve cauſed by conſent; or Diſeaſes eſpecially organical in the humors & membranes of the eye, to wit, a defect of the humors of the Eye, the ſituation of the hole of the Grapy Coat or Apple, or a perverſion of the humors of the Eye, and a change of their ſubſtance, the ſmalneſs or too great largeneſs of the Apple: a white ſpeck appearing from a Suffuſion, *Albugo* or Skar, and a pannicle ſpred over the Eye, or a humor as Choler, Blood, matter collected in the Eye, concerning which we ſhal explain in order what is to be done and foretold in every one of them.

The Cure of the hurts of the ſight with the ober ſenſes if they be by faule of the Brain.

If the hurt of Seeing be by fault of the Brain, and that be general not only vitiating the ſight, but alſo taking away, impairing, or depraving the other ſenſes alſo, both internal and external and by conſequence prejudicing alſo the ſight, the Cure, as alſo the whole handling of them hath been explained in theſe general hurts. As in an Apoplexy, Blindneſs hapening together with the other abolitions of the ſenſes; in a madneſs and Raving, Apartitions, Images, and Vertigoes which are ſupervenient to them alſo with other accidents: and in a weakneſs of the mind, the weakneſs of ſight which accompanies the defect of the internal ſenſes.

The Cure of the proper defects of the ſight if they be by reaſon of the optick Nerve yet lying in the Brain.

But if theſe diſeaſes conſiſting yet out of the Eye in the Brain or Optick Nerve do chiefly hurt the ſight, they ſhal be handled here, and according to the nature of the Cauſe the Cure or prediction muſt be ordered.

If therefore the ſight be taken away, by ſome eminent hurt, or by a Wound about the Eye, forced even to the Optick Nerve as we have ſaid hath ſometimes hapned no other hurt following it, that Blindneſs wil be incurable.

And if alſo blindneſs be induced, the Optick Nerve being contorted by Convulſions as hath been ſaid, unleſs the ſight return of its own accord within ſome few daies as I have ſeen it come to paſs, the Recovery is deſperate; as afterwards I have obſerved them to remain Blind the whole time of their life.

Neither wil there be any hopes of Cure if Blindneſs be left by too much drineſs of the Optick Nerve after moſt Burning Feavers, ſeeing thoſe things which we have ſaid ought to be applied outwardly to the Forehead and Head for to moiſten, in the weakneſs of the memory contracted by drineſs, although they be convenient here alſo, yet for the moſt part they profit little, and can hardly put forth their ſtrength unto the Nerve.

And alſo if Blindneſs be cauſed by external cold from Wind, or by the application of cold Oxyrrhodines, ſeeing cold is wholly an enemy to the Nerves, that hurt is almoſt incurable, yet the Forehead and Head muſt be fomented and anointed with things actually and potentially hot; and chiefly ſweet things muſt be ayplied to the Noſtrils which are hot, and do reach neerer even to the Nerve, the forms of which Remedies we have already explained, in a Stupidity cauſed by cold.

The Cure of a rare Vertigo happenning from the Arteries of the Brain being hardned.

Neither is there any health to be hoped for if that long continued Vertigo be cauſed by fault of the Arteries hardned, as we have ſaid hath ſomtimes been found; the which notwithſtanding ſeeing it can ſcarcely be gueſt at while the man liveth, to foretel any thing certainly of it, were raſhneſs, till after death diſſection being made, the cauſe of the evil being diſcovered, may excuſe the Phyſitian.

The Cure of a Vertigo cauſed by an agitation of the ſpirits of the Brain.

But if a Vertigo be cauſed by an Agitation of the ſpirits in the brain only, from an external cauſe by reaſon of a motion of the Body or only of the Mind, no other cauſe intrinſecally concurring, the cauſe ceaſing, that alſo ceaſeth of its own accord, and the ſooner if by a contrary motion made, the ſpirits be reduced and ſtopt; as if a Vertigo be cauſed by turning round of the body to the right or

left

left side, by an opposite motion to the left or right side, it ceaseth the sooner. In whom also lying on the Back doth good, the which notwithstanding, if the Vertigo proceed from an internal cause or from drunkenness, it doth rather provoke it; if it cease not so, Frictions of the extream parts do help, and Sleep comming upon it, takes it away.

The cure of a Vertigo, Scotoma and Imagination caused by Vapors.

But if this Agitation and Perturbation of the Spirits arise from Vapors carried upwards, whence are caused Vertigoes, and Scotomies and Imaginations, either severally or together; then the Humors which are contained either in the Stomach, or the Mesaraick Veins about the Womb, or else where in the Habit of the Body, and sometimes in the Head it self, from which these Vapors rise, which we have said were cholerick, sanguine, impure rather then flegmatick (seeing we have shewed that Flegm doth cause a Vertigo and Amblyopy for another reason) must be purged forth, and diverted together with the Vapors, by letting of Blood, Scarifications, Frictions, Cauteries, Vomits, and Purges; and that with things given inwardly and applied outwardly: and by Course of life these Vapors must be inhibited, as followeth.

Letting of Blood by opening the Shoulder-vein of the Arm is good in the Plethorick not only if the fewel of the evil lie else where in the Blood, but also if either plenty or spirituous Blood abound in the head and be a Cause of the Vertigo; for seeing in the Cavities of the Brain, both the blood of the Arteries and Veins is confounded, by opening a Vein the spirituous blood also may be drawn forth, in which if the whol evil almost do lie, the principal scope of the Cure is in bleeding; and for that cause they commend also to open the jugulars in the Neck: The which notwithstanding cannot be done without danger, and fear of a great flux of Blood and Barrenness, if we beleeve *Hippocrates*; Nay, spirituous blood causing a Vertigo; most men do teach, that it cannot be cured, unless the Arteries behind the Eares be opened, and tis proved by experience, that after divers remedies a long time tryed in Vain, this kind of remedy hath helped at last, the which nevertheless ought not to be done, unless all things else have been first tried, and when we are certain of the cause, and we know that it doth proceed from that spirituous blood by the continual beating of the Arteries, as hath been said, yet using the greatest diligence, because the Wound doth hardly grow together, the Arteries being first laid bare, that afterwards it may be tryed. Also a Vein may be opend in the Fore-head in a Vertigo arising from this cause, and in the Foot, if Vapors ascend from thence; and if the Courses were suppressed, the Ankle Vein, especially if the cause sending up the Vapors lurke about the Veins of the Womb; upon which account the Hæmrhoids also are most profitably provoked if the Fewel of the Evil be contained in the Mesaraicks. Scarifications for the same reason do good, being made instead of bleeding and after it, for Derivation, on the sides of the Neck, Shoulders, Cupping-glasses being applied to, although the cause be in the Head, or from elsewhere be carried upwards by Vapors and Scarification in the Region of the Wrist, or that outward part of the Hand which is betwixt the Thumb and the fore Finger is thought a peculiar remedy in the Vertigo the which also made in the extream parts is good, if an Air be felt to ascend from thence, in that place from whence it is known first of all to arise.

Frictions ought to be made from the Neck by the Back-bone to the lower parts by degrees comming to the extream parts and rubbing them. For so the Vapors and Spirits are recalled; after which, that that collected in the Head may be discust, let the Head be rubbed with a new cloth (not heating it, as otherwise they are wont to do, that there be no attraction of Vapors to the Head.)

And also if a Vapor proceed from some part, binding it with Ligatures, the Vapor may be hindered that it ascend not.

A Cautery in a persevering evil, or a Vesicatory which empties more humor, must be applied for greater diversion sake, upon the same account in the middle of the conuext part of the Head or behind the Eares, whether it be Actual or Potential; and sometimes also in the Feet or other places, if a Vapor be felt to rise from thence.

A Vomit will help very much, if the matter in the Stomach or Mesaraick Veins especially the Cholerick as hath been said, doth produce Vapors; in imaginations, Scotomies and Vertigoes proceeding thence; which must be caused first with the gentler, by and by with stronger, if the matter lurke in the Mesaraick Veins, many times repeated, if they are able to bear it.

Purges must be used in all those Species, if the matter sending forth Vapors consist in the same first passages, or else where in some other seat of the body, and if such an Evaporation arise in the Head from impure blood, that filth must be purged forth, fitting them rather for the drawing forth, of Cholerick, And impure humors from which these Vapors rather, which are subtile, are elevated, then for the purging of Flegm: of the Evacuation of which, if it be the cause of a Vertigo or weakness of sight, we shall treat hereafter, having respect also in the interim to the constitution of the the Body, in the choice of them. But this will be performed by giving first of all some gentle Stomach Pills made of Aloes and the Hieræ, or a Bole.

Then we must first prepare the matter if it want preparation, and chiefly open Obstructions, after this manner.

If the matter lie in the Stomach, and Choler, or crudity be the cause there, Take *of simple Oxymel, Honey of Roses, of each one ounce; Syrup of wormwood Wine, Pomegranates, of each half an ounce; the waters of Wormwood, Marjoram, as much as is sufficient.* Make a Julep.

Or if it lurke chiefly in the Mesaraick Veins, Take *of the Syrup of Succory, of the juyce of Endive, of each one ounce; of the two opening Roots half an ounce; the waters of Wormwood, Succory, as much as is sufficient.* Make a Julep.

Or, give *Wormwood Wine* which especially in those, Species of a *Vertigo* is very much commended: and that either *simple* or in which the *opening Roots* and *Marjoram* and other *opening things* have been first infused.

Then he shall be purged with a stronger Medicine. As, Take *of Pills of Hiera or Mastick half a dram, Cochiæ half a scruple, Oyl of Fennel, or Anise, of Caranaies* (by reason of the Vapors) *one grain, Piony seeds four grains with white Wine.* Make Pills.

Or usual ones may be made thus, of which let him take sometimes *two scruples*: Take *of Pills of Hieræ Compound, Aggregative, of each two drams, Agarick Trochiscate, Rhubarb, of each one dram; seeds of Cinnamin, Piony, of each one scruple, with Syrup of Roses solutive.* Make a Mass for your use.

Or let him take this Bole; Take *of Cassia three drams, the Hiera of Hermes two drams.* Mix them.

Or make a good quantity, of which let him take by intervals a *Bole of half an ounce*: Take *of Cassia one ounce*

and

and an half, the Hiera of Hermes one ounce, of the five kinds of Myrobolans of each two drams. Dodder of Time one dram, pouder of Peony root half a dram, Cummin seed one scruple, Syrup of Roses solutive as much as sufficient: make an *Electuary*.

Or give this Potion or Infusion. Take *of Rhubarb one dram, Agarick two scruples, Citrine Myrobolans two drams, Wormwood one dram, Cinnamon half a dram, Ginger one scruple*, infuse them in *thin white Wine*, strain them and dissolve *Syrup of Roses solutive one ounce*, Give it.

Or thus, Take *of Agarick trochiscate infused in Oxymel and strained one dram, of Rhubarb infused in wine diluted with Wormwood and Bettony water, two drams*; *Cinnamon infused with Rhubarb half a dram, Syrup of Roses solutive two ounces*: make a *Potion*.

In the Interim the Vapors must alwaies be repress, which in the Vertigo, Scotoma, and Imaginations do assail the Head, the place in the mean while being considered from whence they arise.

For if this be from the Stomach and Mesaraick Veins the following Electuary is convenient, which shal be given after Dinner and Supper, and sometimes in the morning the quantity of a Chesnut, as, Take *Conserve of Roses two ounces, Marjoram one ounce, Flowers of Peony half an ounce, Quinces candid one ounce, Citron pil half an ounce, one Emblick Myrobolan, the Rob of Currans* (in Cholerick bodies) *half an ounce, the pouder of Diacitonites without the species one dram, Coriander seed prepared one dram, Fennel, Peony root of each half a dram*; *Coral one dram, Mastick half a scruple, with the Syrup of the Conserve of Citron pill* make an *Electuary*.

Or let him use one spoonful of this pouder called *Post pastum*, Take *of Coriander seed half covered with Sugar one ounce, Anise seed condite in like manner half an ounce, the pouder of Diacytonites without the species one dram, Diarrhodon Abbatis, Red Saunders, dry Citron pil, of each half a dram*; *Leaves of the greater Eyebright one scruple, Mastich half a scruple, Lozenges of Sugar of Roses two ounces*, make *Pouder*.

Lozenges may be made of *the pouder of Diacytonites without the species one dram, Red Coral half a dram, Shavings of Ivory one scruple, with Sugar dissolved in Rose water to two ounces*: make *Lozenges*.

A most excellent Remedy also to hinder Vapors is, if the Paroxysm befall them fasting as it is wont to be, to give them meat, the which being taken it presently grows mild, or the Vertigo, Imagination, Scotoma ceaseth, and by this only some have been restored, shunning Fasting.

Sleep because it discusseth Vapors doth help very much in these cases,

Plaisters, Cerecloaths are applied outwardly to the Region of the Stomach if the Vapors proceed from thence and the Mesaraick Veins, that they may hinder them; which they wear in the night.

As a Plaster of Mastick or some other made for the Stomach, malaxed with some astringent Oyl, or *Galens* Cerecloath for the Stomach.

Or such a one, Take *of red Roses, Leaves of Wormwood of each two drams*; *dried Citron pil, Labdanum of each half an ounce*; *Mastich two drams*, Pouder them and with *Oyl of Quinces* or *Mastich*, adding *Wax*, make *a Cerecloath*.

If these Vapors rise from about the region of the Womb, let the same Plasters of Mastich or *pro matrice* be applied to that part, and let the Woman wear it for some time, unless the stoppage of the Courses forbid it, for when they flow, they must be omitted.

If a Vapor ascend like an Air from some other part of the Body as the Feet, or others, doth create a Vertigo, as hath been said; then the washing of those parts doth very much divert it, as also if it be done in other causes.

The which may be done thus, Take *of the Leaves of Sage, Rosemary, Celtick Spike, Groundpine, St. Johns wort, flowers of Chamomel, Roses, Lavender, as much as will suffice*, boyl them *in Wine* and *Lye*.

Afterwards let him anoint his Feet with the following Oyntment, Take *Oyl of Bays, Worms, Wall-flower, of each one ounce*; *Aqua Vitæ half an ounce, a little* Salt: boyl them for your use.

If necessity urge very much, Oxyrrhodines must be applied to the Head which may repel vapors, and if it continue, we must add things more strongly astringent, as Juyce of Plantane,

And successively such a Cap may be worn, as, Take *of the roots of Galangal, the true Acorus, Citron pill, of each one dram*; *Coriander seed, two drams, Myrtles one dram, flowers of Roses, Rosemary, of each half a dram*; *Cloves half a dram*, make *a Pouder for a Cap*.

Some have put Remedies upon the Eyes in Imaginations and Scotomaes, which we think superfluous, seeing the Vapor doth no waies reach unto the Eyes.

In course of Diet let all things be moderate, the meat simple, not too much; also let them drink Wine sparingly or diluted; let too much motion of the body be avoided and chiefly too much agitation or bowing down of the Head, and let them beware of looking on things wheeling about, or very bright; and let them abstain from too much agitation of the mind by study and watching.

They think that Crystal worn is of very great force in a Vertigo, and for the same benefits sake they drink out of a Cup made of it, or they put crystal into their Cups.

The Cure of a weakness of the sight and Vertigo proceeding from a watry and flegmatick humor of the Brain.

It hath been said that a Repletion of the Brain from a watry, serous, and flegmatick humor doth cause a Vertigo by its fluctuation and wind, and by an afflux of the same humor to the optick Nerve, Blindness doth sometimes arise, or by an irrigation of it an Amblyopie, and besides these hurts of the sight which are by reason of the Brain, it hath been demonstrated, that no other faults of the Eye prejudicing the sight can be caused from flegm or any afflux of such a humor which can neither enter the Net-like Nerve nor the Eye; and therefore we apply this Method of Cure only to these Diseases which is due only to this cause, neither do we refer it as others have done, to Suffusions or other affects of the Eye which also they beleeved did proceed from an influx of flegm.

But here although such a Cure be convenient, as is due to a Carus, Apoplexy, and other flegmatick Diseases of the Brain, and therefore perhaps ought not any more to be repeated in this place, yet that we may understand after what manner they are to be applied to the sight in these Diseases, we wil here explain.

But a Vertigo springing from thence is dangerous, if there be a great Repletion of the Head, such as hath been demonstrated, we have often found, which seeing it can hardly be taken away, somtimes it ends in a Carus and Apoplexy, the which it presageth: as also an Amblyopie, if it happen from thence in space of time is converted into blindness which sometimes is wont to be at the first presently from the beginning, the humor flowing abundantly: the prevention of which therefore in a Vertigo and Amblyopie springing from thence we shal study to Remedy this following manner.

Firſt we wil endeavor to take away thoſe excrementitious, ſerous and flegmatick humors of the Head, by Emptying, Revelling, and driving them from the brain; then by heating the brain which doth generate them, and again is moiſtned and cooled by them, and by ſtrengthening it, by thoſe things which are appropriate to it, the Nerves, and the Eyes; and alſo the hindring that the cauſe be not generated anew, or fomented: which ſhal be performed by Remedies applied inwardly and outwardly, by Purging by the ſtool by the Mouth, and Noſe, or by drawing away of Blood: Or by things applied to the Head, or other parts conſenting with it; or by giving things that alter, and by courſe of diet, not neglecting Amulets.

Purgations by the ſtool for drawing away of flegm from the Head, and for hindering that the cauſe be not generated anew, are thus methodically ordered.

A Goading and ſharp Clyſter is premiſed, the which alſo is profitably injected by intervals or weekly.

And in theſe hurts of the ſight it wil be thus more applicable. Take *of the freſh roots of Orrice, Peony, each two ounces; the herbs Centory the leſs, Betony, Rue, Eyebright, Fennel, of each one handful; flowers of Camomel, Lavender or french Lavender of each one pugil; Fennel ſeed two drams, Carawaies one dram, Senna* (which by a propriety is good for the Eyes) *half an ounce, Agarick tied in a rag three drams, Bran one pugil*, make a *Decoction*, diſſolve *of common Honey or Honey of Roſemary flowers one ounce, Hiera of Logadius or Hermes half an ounce, Oyl of Rue, Lillies, of each one ounce, Niter a little*; make a *Clyſter*.

The humor is prepared before Purging for ſome daies, by a Julep, or Decoction, or Wine.

A Julep ſhal be made thus, Take *of Honey of Roſemary flowers (inſtead of Honey of Roſes* or *Oxymel*, which by reaſon of the *Vinegar*, wil not be ſo profitable for the Nerves) *Syrup of French Lavender, of Betony, each one ounce and an half; the waters of Eyebright, Peony flowers, Fennel, Marjoram, each three ounces*; mix them, aromatize it with *Nutmeg* and *Cinnamon*.

Thus may be the Decoction for ſome Doſes, Take *of the roots of Orrice, Peony, each one ounce; the herbs Speedwel, Eyebright, Fennel, Roſemary, Mint, each one handful; flowers of Roſemary, French Lavender, Peony, each one pugil; ſeed of Fennel, Aniſe, each two drams; Carawaies one dram, Damask Prunes ten, Raiſons twenty*, boyl them and *in one pound and an half* infuſe *of the pouder of Galangal, Ginger, each one dram; Cinnamon two drams*, afterwards ſtrain them, adding *of the beſt Honey or Sugar as much as is ſufficient*, or *of the forementioned Syrups*, till it grow ſweet.

Or make a Wine when bitter things are added as Centory which here is very profitable, Take *of the Leaves of Eyebright, Speedwel, Centory, all dried, Fennel ſeed each half an ounce; Carawaies two drams, Nutmeg one dram*, bruiſe them, for one meaſure *of white Wine* for your uſe.

Afterwards Catharticks that purge flegm muſt be given, but ſuch as are appropriate to the ſight, as thoſe which have in them Senna and Fumitory, and of compounded ones thoſe which admit the juyce of Fennel.

Such as are the greater and leſſer *Pilulæ lucis*, ſo called beauſe they bring light to the Eyes, and thoſe alſo called *Arabicæ* and *ſine quibus*; and of Electuaries the greater and leſſer *Indum*, we may uſe theſe that follow.

Firſt of all Pils which he ought to take at midnight, if he be not unfit for ſwallowing of them, Take *of pils* ſine quibus *half a dram, Lucis the greater, the Arabick pils, pouder of Hiera of Coloquintida, each half a ſcruple; with Water of Eyebright, or juyce of Fennel*, make *Pills*.

Or let him take this Bole, Take *of Electuary Indum, the Hiera of Hermes, each two drams and an half, with Sugar* make a *Bole*.

Or Decoction, Take *of Fumitory, Eyebright each one handful; Senna half an ounce*, make *a Decoction in Water and Wine and Honey* (inſtead *of Hydromel* or *Oxymel*) infuſe *Agarick, Turbith, each one dram; Ginger one ſcruple, Sal-Gem half a ſcruple*, ſtrain it and diſſolve *Syrup of Fumitory compound one ounce*, make *a Potion*.

Or we may take one doſe of the following compoſitions and give it inſtead of theſe, for ſeeing in theſe diſeaſes of long continuance, we ought to uſe once in a month or week by courſe, Phlegmagoges, and in the interim Purgers appropriate to the ſight, ſometimes the Preparatives being repeated again, the following forms may be prepared for this uſe.

The Form of Pils is wont commonly to be more fit and uſual than the reſt, by which they may more commodiouſly ſwallow things that are ingrateful, which here are very neceſſary; by making a maſs for your uſe, the quantity of whoſe doſe ſhal be from two ſcruples to a dram, Take *of Aloes two drams, Turbith, Agarick, Rhubarb, Senna, each one dram; Myrrh, Maſtich, each half a ſcruple; Tartar, Salt Gem, each half a ſcruple; Ginger one ſcruple, ſeeds of Fennel, Rue, each one ſcruple; Caſtor ſix grains, with the juyce of Fennel and Rue*, make a maſs and if you add *Hiera of Coloquintida and a little Scammony* they wil work more ſtrongly.

Or make them thus of the uſual ones, Take *of the Pills* ſine quibus, *Aureæ, each one dram; Lucis the greater, Arabicarum, each half a dram; Pouder of Hiera of Coloquintida one ſcruple, Oyl of Fennel two drops, juyce of Fennel as much as is ſufficient*, make *a maſs*.

If he had rather have an Electuary make ſuch a one, of which let him take from three drams to half an ounce, at once by it ſelf or diſſolving it with Eyebright and Fennel water. Take *of Electuary Indum the greater, Diaphœnicon each half an ounce; Hiera of Hermes five drams, Fennel ſeed one dram, Cinnamon, Cloves, each half a dram; with french Lavendar*, make *an Electuary*.

If he delight more in a Pouder, let the third part of this following be given with a Julep made of Syrup of French Lavender, and Eyebright water, Take *of Turbith, two drams, Senna half an ounce, Tartar two drams, Ginger half a dram, Fennel ſeed one dram, Scammony one ſcruple, Sugar one ounce*, mix them, make *a Pouder*.

A uſual Syrup wil do it, prepared after the following manner, from which firſt of all a Decoction being made may be given for three daies together, and afterwards out of all the ſame in double quantity a Syrup may be boyled to be kept for uſe, Take *of the roots of Fennel one ounce, Orrice half an ounce, Acorus, Galangal, Elecampane each two drams; Liquoriſh ſix drams, the herbs Fennel, Vervain, Eyebright, Betony Fumitory, each one handful; Time, Hyſop, each one handful and an half; flowers of French Lavender, Roſemary, Borrage, each one pugil; ſeeds of Fennel two drams, Carawaies, Aniſe, Hartwort, Mountain Seſels of Marſelles, Rue, each one dram; Raiſons twenty, Senna two ounces, Oak-fern, wild Saffron, each one ounce and an half; Agarick trochiſkate half an ounce, Turbith two drams* (for the rich you may add *Rhubarb*) *Ginger one dram, Cinnamon two drams*, make a Decoction, add *Sugar two ounces, for three doſes*, or all things being doubled as hath been ſaid, let it be reduced into the form of *a Syrup*.

A purging Wine is more pleaſing to ſome, and more effectual, ſeeing it is made only by maceration, or with a light boyling, and bitter things given after this manner, are not ſo ungrateful, which after the ſame

manner

manner as the Syrup may be drunk three daies together, and afterwards the Pouder being divided into three parts, and one alwaies being infused in the Wine for one dose may so be given by course without corruption.

Which Pouder for to steep may be made thus: Take *of Wormwood two drams, Centory one dram, Eybright, Verveine, Rue, of each three drams; Seeds of Fennel two drams, of Rue one dram, Senna one ounce, Turbith two drams, Agarick half an ounce, Barke of black Hellebore two drams, Tartar two drams, Ginger one dram*: Make a Pouder for the Wine.

After the Body hath been purged, we must derive it from the Brain, by the Mouth and Nostrils as through a way destained for the purging forth of Flegm; which purging is so much the more convenient because it presently purgeth from the very sear affected it self, those Excrements of the Brain collected there, to which sear this way leads strait; and this is done by Head purgers or those called *Apophlegmatisines* used in the morning fasting, in the form of an *Errhine, Masticatory* or *Gargil*; of which the following may be here used.

Errhines which are attracted with the Nostrils, shall be made thus: Take *of the juyces of red Pimpernel, of the roots of Beets* or *Mercury, Marioram, of each one ounce; Fennel, Rue, of each one ounce; white Wine half an ounce*; Mix them: *if the juyce of Sowbread* can be had, and be added it would be more effectual, as also *Gauls*, but if they be attracted into the Jaws they offend them with too great bitterness.

When they do not willingly use Errhines, anointing of the Nostrils is good, by daubbing them even to the very bottom, with some of the stronger forementiond juyces especially of Sowbread.

Or with this Liniment: Take *of the juyces of Marjoram, Sowbread, the roots of Beets or Mercury, of each two drams; Elaterium six grains, Oyl of Orrice three drams, Honey and Tupentine a little*, that you may make it like *Nutritum*.

Let him chew the following Masticatory spitting often; Take *of the Roots of Pellitory of Spain, the seeds of Staves-acre, of each one dram, Cubebs, Pepper, Fennel seed, of each half a dram; Marjoram one scruple, Mastick two drams*, receive them in the *Pulp of Raysons* adding a little *Wax* if they stick not, to make *final Balls*.

Such a Gargle will be convenient, with which he may wash his mouth and Gargle his Throat, Take *of the Roots of Pellitory of Spain, Orrice, Angelico or Masterwort, of each half an ounce; the Herbs Marjoram, Sage, Hyssop, Rue, Ey-bright, of each one handful; flowers of Lavender, Rosemary, of each one pugil; seeds of Fennel, Rue, of each two drams; Nutmegs two dram*; Let them boyl in *Wine* and *Water*, adding *Honey as much as is sufficient*: And make a Gargel.

By drawing of blood by a Vein opend we cannot turne forth the Flegm from the Head, unless it be Flegmatick in the Brain, and so by drawing it out we do by this means in some manner substract the matter that did generate these Flegmatick Excrements, which notwithstanding is not to be done except in the Plethorick and to whom it is accustomary and whose blood appears very impure, unless some other Disease joyned with it as a pain of the Head, do perswade it.

And also that revulsion of the blood to another part, which is done by Scarification will do good upon no other account, but as by the attraction of Cupping-glasses applied, the serous humors also are emptied too, as shall by and by be explained.

Remedies are applied to the Head that these Excrementitious humors, which are the conjunct or Antecedent cause of the Disease, may be altered, discust and called forth, and the part it self may be strengthend too, and that after divers manners.

Lotions of the Head being sometimes made, are thus convenient, which being very appropriate do consume the Humor. Take *of the root of Orrice, Bay* or *Galangal, of each one ounce; the leaves of Marjoram, Rue, Sage, the tops of Fennel, and Rosemary, Verveine, Celandine, Eybright, Betony, Ground-pine, of each one handful; Flowers of Chamomel, Lavender, French Lavender, of each one pugil; Berries of Bayes, Juniper, of each one pugil; Fennel seed half an ounce, Rue one dram, Senna one ounce, Agarick three drams*: Make a Decoction in a Lye, made *of the Ashes of Juniper, Roses, Bayes*, adding a fourth part of *white Wine* for a Lye.

A Cap performeth the same but successively, being worn, especially by night, stuffed with these things following, which also breaths forth a pleasant smel: Take *of the Roots of Orrice, Angelica, of each two drams, the true Acorus, Galangal, of each one dram; the Leaves of Marjoram, Rosemary, flowers of Roses, Lavender, of each half a dram; Nutmeg, Cloves, of each one dram; Coriander seed prepared one dram and an half, Gith half a dram*. Make a Pouder for a Cap, the which also if it be strained on the Hairs sometimes doth work more powerfully.

Suffumigations do the same, whose vertue enters the Head and dries the better, whose clausers, and Caps tis better to suffumigate, then their Nostrils, for thus they would move a Vertigo and hurt the sight.

Which prepared after divers manners, and being made of Juniper berries, they are also appropriate to the sight. *Dioscorides* writes that smelling to Galbanum doth take away the fits of the *Vertiginous*.

Lotions of the Feet being sometimes used, by a certain communion with the Head, do very much divert the Excrements from it, and strengthen the Head; which may be prepared of the same things, with which we have said the Head ought to be washt, or also with other lyes hot, sweet, especially Cephalick things being first first boyled in them.

Vesicatories and Cauteries do more strongly call forth serous Humors, and the Excrements of the Brain, applied to the upper part of the Head, or behind the Ears or in the Neck.

A Puncture made in the Skin of the Neck and a string run through it, which they call *a seton* or *Setaceum* doth the same.

And *Hollerius* writes that Scarification made in the hinder part of the Head with Cupping-glasses applied, hath sometimes suddainly restored the sight lost by reason of the Optick Nerve, even whiles the Cupping-glass hath yet stuck on.

The same things given inwardly in a Vertigo and weakness of sight proceeding from flegm, do agree with both, the which ought to be appropriate to the Head and Eyes, and to heat and strengthen them and to hinder the production of flegm by helping the first and third Concoction, and especially to repress Vapors which by oppressing the head do hinder the fit and hurt the sight and to discuss those as also wind; which are used in divers forms and manners.

Some things given in Bread do good, as if seeds of Carawaies, Fennel and Mace be mixt with it in working, or if Ginger, Cloves bruised, with *Aqua vitæ* poured to it, be added to it in like manner, which *Paracelsus* did very much approve off.

And also the other meats may be season'd with these, or such a Pouder be prepared for the Meat: Take *of Annis, Fennel seed, of each two drams, Carawaies, Mace, of each one dram; Cinnamon three drams, Sugar two ounces*,

ounces, make *a Pouder*, to be ſtrewed on *Rice* or other *Meats*.

But ſuch a one may be made, which is uſed with Meats, or with a potched Egg. Take *of Salt one ounce, Nutmeg, Mace, Caraway ſeed, Leaves of Eyebright, Marjoram, each half a dram*; mix them.

Other moſt effectual Pouders are divers waies made thus, to be given themſelves in the morning, or with ſome particular water as of Eyebright mixt with Wine (ſeeing Waters given alone, are not ſo grateful or fit for the Stomach) of which this ſingular one hath oftentimes been happily uſed, as Take *of Mace two drams, Cinnamon one dram, Leaves of Eyebright one ounce, Sugar the weight of them all*, give *two drams*.

Another very profitable if the Vertigo doth threaten an Epilepſie, Take *of the aſhes of Swallows, a Mans Skul each two drams; Viper half a dram, Fennel ſeed two drams, Caraways one dram, Peony, Mace, each half a dram, Cubebs one ſcruple, Leaves of Eyebright, Marjoram, each two ſcruples; Lozenges or Sugar of Roſes the weight of them all*, make *a Pouder*.

Of thoſe mentioned Lozenges, may be made, as alſo of the uſual ſpecies, eſpecially of Diarrion Piperion, Diacuminum, Dianiſum, Arromaticum Roſatum, Diagalanga, Roſata Novella, Diambra, Diamoſchum, adding of thoſe that are more temperate, Diarrhodon, Trionſantalon, the Cordial ſpecies and of Gems.

After meals Pouders are uſed eſpecially to drive away Vapors and to order a good concoction, after this manner, Take *of the following ſeeds half coverd with Sugar, Coriander one ounce, Aniſe half an ounce, Fennel two drams, Caraways, Cubebs condited alſo each one dram and an half; Leaves of Eybright, Marjoram, red Roſes each one dram and an half; Cinnamon three drams; Mace half a dram, the ſpecies Diacitonites cum ſpecibus one dram, Sugar the weight of them all*, make *a Pouder*, let him take one ſpoonful.

Some add to the pouders after Meals, Senna two ſcruples, and ſo they think the Vapors are more ſtrongly repreſt.

Others prepare them thus of Rhubarb in manner following, to repreſs Vapors yet more powerfully, Take *of Rhubarb two drams, Cammels hey, Origany each one dram; Tables of Sugar of Roſes two ounces with ſyrup of Mint* make *a mixture*, let him take one ſpoonful one hour before Dinner.

If he going to bed doth ſwallow two or three grains of Maſtich, the Vapors are very much repreſſed.

In like manner dry Sugard Confections are taken after meat, made of ſeeds of Coriander, Senna, Aniſe, Carawaies, Cummin and Cubebs covered with Sugar, Citron pil and others.

But alſo the bare ſeed of Fennel or Carawaies, or Juniper berries eaten in the morning do good in a Vertigo and weakneſs of the ſight, eſpecially if afterwards they ſo receive their breath with their hands before their mouth, that thence it aſcend upwards to the Eyes.

The uſual Electuaries are approved of to be taken in the morning, as Treacle, Mithridate, Aſyncritum, if they be very old. Alſo the Tryphera of King *Sabor*, and *Hollerius* his Electuarium Regium, by themſelves or mixt and taken with other things.

Of the other Conſerves and Conditures that are kept and are convenient here, we may make ſuch an Electuary, Take *of the Conſerves of Sage, of Roſemary flowers, Marjoram, French Lavender, Lavender, Betony, flowers of Clove Gilly-flowers, Groundpine, each half an ounce; of Roſes, Borrage, Diacorus, each one ounce; Emblick Myrobolans condited one, Citron pil one ounce, Leaves of Eybright, Organe, each one dram; Fennel ſeed one dram and an half, with the Syrup of Green Ginger* make an *Electuary*, let him take in the morning the quantity of a Cheſnut.

Or the following Confection which is moſt effectual may be made thus. Take *of the roots of Peony Miſſleto of the Oak, each one dram; the leaves of Eyebright, three drams, Marjoram, Roſemary flowers, each two drams; Organy one dram, Fennel ſeed two drams, Aniſe, Carawaies, each one dram; Cummin, Hartwort, Baſil, Peony, each half a dram, Cubebs, Mace, Cloves, Cinnamon each half a dram; Corral two ſcruples, Pearl half a ſcruple, the Skul of a Man one dram, Ivory half a dram*, make *a Pouder*, mix it with *Honey of Roſemary flowers* or with *the juyce* boyled, let him take in the morning, the quantity of a Nutmeg.

Stilled Waters are commended which may be taken by themſelves or after other things, as Cinnamon Water ſomtimes taken.

And ſuch a one may be provided, Take *of Vervain, Eyebright, Rue, Marjoram, Groundpine, each half an ounce; ſeeds of Fennel two drams, Cinnamon half an ounce*, ſteep them *in Mallago Wine* and diſtil them, let him take ſomtimes one ſpoonful, to which you may add Sugar, that it may be the more grateful; the reſt you ſhal find in the cold Diſeaſes of the Head.

The Chymiſts magnifie the Salts, Eſſences, and Oyls of the forementioned things.

As concerning the Courſe of life that is neceſſary to the conſervation of life, it ſhal be ſo ordered, that the cauſe of theſe affects be not augmented by it, but rather diminiſhed, and the ſymptoms themſelves be mitigated, which wil be done by temperance and mediocrity in all things, of which we have ſpoken already, as alſo of the Amulets which are agreeable to the Sight alſo, in the former Cure, of the Cauſe of a Vertigo the other Remedies of it we ſhal deſcribe by and by in explaining the Oxydorcical or ſight-cleering Medicaments.

The Cure of the want of ſight by reaſon of the Net-like Nerve in the Eye affected by conſent.

The Net-like Nerve being affected by conſent, which is made for the ſpirits ſake with which it ought to abound; if this come to paſs by reaſon of the influx of the ſpirit hindred, by occaſion of the Brain and the Optick Nerve growing to it, what muſt be foretold and acted, hath been already explained in their diſeaſes.

And if Blindneſs be cauſed by preſſing of the Eye the ſpirits flying back and ſtaying for a while, by and by that ceaſeth of its own accord, the ſpirits returning back again, unleſs there have been ſome eminent hurt cauſed.

But if they being laid aſleep in the Nerve by reaſon of long continued darkneſs cannot for a while enjoy the light which is at length offerd to them, and they are Blind or dark-ſighted, then the ſpirits muſt be raiſed again and brought into act with Light, by degrees not by too bright an one at firſt, by and by offering a greater light, that ſo by little and little they may accuſtome to endure, until they come again unto the perfect cuſtome of ſeeing.

But the contrary muſt be done in thoſe whoſe ſight is darkned by too much brightneſs, that they may the ſooner and truer receive the uſe of it, to wit, by offering them Darkneſs by degrees, firſt placing them in the ſhade then in a more obſcure place, at laſt for a while in the dark it ſelf.

Which cuſtom of Light and darkneſs in them both being reduced by degrees, unleſs it do good, there is danger of a perſevering blindneſs or dulneſs of ſight the which we ought to foretel, not neglecting in the mean time ſight-cleering Remedies.

But

But if the Net-like Nerve be affected by consent, because it is destitute of the external light, and that ceaseth by reason of darkness induced in the air, by and by, by the brightness of the Sun or fire (besides which nothing hitherto hath been found out, which can sufficiently do it) that being illuminated again, the light returns, and the Eye sees again.

But if the light be withdrawn from it, by the impediment of the humors or Membranes of the Eye, the Cure shal be declared in their faults.

The Cure of Blindness from a defect of the humors of the Eye.

If a defect of humors of the Eye cause Blindness, all the humors falling forth together, through a Wound or Ulcer, nothing must be attempted here besides the Cure of the Wound and Ulcer, which shal be explained in the pains of the Eyes, and the evil must be foretold to be incurable.

The which also is to be done and said, if only the watry humor be poured forth, seeing it cannot be repaired; unless by chance, if a narrow puncture being made in the eye, either by chance or purposely, by reason of taking away a Suffusion, the watry humor threaten a flowing forth (the which notwithstanding scarce comes to pass, if the Needle be thin and drawn forth gently) then shutting close the Eye-lids and afterwards pressing the Eye and laying astringent things upon it, and a Roul applying (as we shal declare by and by in pricking a Suffusion) we repress the flowing forth of the humor, til the hole grow together again.

But some part only of the watry humor being poured forth out of a Wound, or being wasted by Diseases or Age, so that it hurt the sight if it be little, and there is yet no other fault in the Eye adjoyned. In young folks in whom that humor may be repaired by the nourishment of the Eye, we may yet Hope wel, and commit it to nature, but in other there is no Good to be judged.

The Cure of some impediments of the sight and of squinting by reason of the situation of the Apple contorted.

If the Perversion of the natural situation of the structure of the Eye do hurt the sight, and the whol Eye be so contorted, that the apple stand not forth in the middle seat of the forepart of the Eye, but be hidden in either side, as we have said hath sometimes come to pass by a Wound, that being thrust to the inner part of the Nose, it could not see but through it; or otherwise from the Birth, the Eye being inverted it is so coverd with the Eye-brows that the Sight is hindered, these faults can by no means be amended; as neither that, if from the first Nativity the Apple being not altogether hid, but yet enclining too much to one side, the Eye being as it were neer Convulsed, or otherwise drawn thither doth give occasion for a squinting as hath been said; the which also are let alone seeing they little or nothing prejudice the sight.

The Cure of some hurts of the sight & of squinting from the bowing of the crystalline humor or motion of it to the side.

But if that the Crystalline humor by some means bowed or a little way drawn from the Circumference of it, doth breed a weakness or Error of the sight, or be one of the causes of a Squinting; then if this were suddenly done by some violent cause, unless by and by of its own accord it recover its natural situation, it is now impossible to effect by art; and by so much the less, if this fault be contracted from the Birth.

But if that the same crystalline humor otherwise placed right, except that a little going backwards from the forepart which it ought naturally to occupy, possessing the exact middle or more hinder region of the Eye, doth induce that sight in which they do not rightly see things a little more distant, and for that cause they are compelled to apply things neerer or close to their Eyes; seeing this for the most part happens from the birth, and we cannot reduce the humor into its natural state, it is impossible to alter this seeing, unless it be changed by course of Age, by that long continued bowing down of the head towards the fore parts the whol life time, the crystalline humor alwaies bearing forwards and by degrees being brought thither: as I have often found by experience, both in others and my self, that this seeing, is changed when they grow old, so that then they can see things better at a distance, than when they are yonger; and then this benefit accrews in the correction of this fault (if so be it be a fault, seeing what is lost in the sight for knowing of things more distant, is gained by it in more rightly discerning of things neer) that when necessity requires to know things far distant, we can by applying a most bright prospective made of a thicker Crystal Glass which represents things to the Eye lesser than they are, correct this defect of the inner prospective, to wit, the crystalline humor, because it is too neer to the net-like Nerve and so obtain in Seeing that which we desire: the which Prospective notwithstanding, it is not requisite should be alwaies of one kind, but as the crystalline humor is more or less gone backwards, it ought to be applied more or less neer to the Eye, and to be less, or much more thick; as we see in those that are called *Myopes* some are convenient for some, not others, and yet not much different, as experience shews us this, that what Glass ought to be chosen, is rather to be done by trying it by the Eye than by any explicable description, unless they that make them, know how to do it.

The Cure of those sights by which they see not things unless very neer, or by which they see things distant better than those neer, by the carrying of the crystalline humor forwards or backwards.

But as this sight springing from the Birth can no waies be changed, but only be corrected by another Instrument applied, that more grievous impediment of the sight by process of again which they cannot rightly see things neer hand, but better if they be far removed from the Eye, which we have said doth come to pass by the crystalline humor carried too much forward, cannot be amended any other way than by a thin Glass spectacle representing things to the Eye greater than they are; the which they having continual use of, that they may see handle and read the lesser things, they alwaies carry about them; and two Glasses are so formed in a frame, that fastning such an Instrument to the ridg of the Nose, by the great mercy of God they can use it to the right discerning of things.

The Cure of Nyctalopy *proceeding from an obscure crystalline humor.*

The Crystalline humor being made more solid or obscure if it induce that weakness of sight in which, darkness growing a little on they see obscurely or nothing, or somtimes that being wholly hardned they become blind it cannot be corrected by Remedies nor Spectacles seeing they cannot bring brightness unto it.

The Cure of a Nyctalopy *from the narrowness of the Apple.*

A too small and narrow hole of the Grapy Coat called the *Pupilla* if a too large hole effect that the sight be easily darkened with too much light, and it discern

more rightly in a darker place; because this fault is Original also it cannot be mended neither by Medicines nor Spectacles; because the cause is in the Membrane and not the humor unless in as much as they whose sight is offended with brightness, may be prevented from too much light by partly shutting up their dwellings places, or from the brightness of a candle by interposing some glassy Obstacle, at night while they read, or earnestly behold some other thing, that they may not molest the sight.

The Cure of the evening sight from the largness of the Apple,

Although many do attempt to Cure these and other faults formerly mention'd, no waies appearing in the Eye (being ignorant of the true cause of them, and referring all things to the thickness of the Spirits and Defluxions) and for gains sake, do rashly promise that they will do it; in Vain tormenting the sick with purges and other things and applying Eye clearers: The which notwithstanding we may use, if we are minded to try, let the event be what it will: those things which can no waies hurt, but may be used without trouble: of which sort you will find many in the remedies which are proposed almost the same, both in a weakness of the sight and *Nyctalopy* and evening sight and *Myopsie*; of which we will add these few examples of our own.

Oxydorcical remedies which are convenient to restore the sight in its various hurts are here explained in general

If at any time it be needful to administer purges either because the Body otherwise hath need of Evacuation or by reason of the Stomach from whence Vapors carried upwards do also prejudice the Sight or for some other causes rather then by reason of the Disease in the Eye which of it self doth no waies require Purgers; they must be made according to the Cacochymy abounding in the Body.

Yet they are chiefly to be made choice off, which amongst Purgers are appropriate to the Eye, as Senna, which we have formerly said both taken and applied, doth by its whol property refresh the sight; Fumitory also, which as is reported doth clarifie the sight.

Of which we may prepare such a Composition, as this following; adding also other things appropriate to the sight: Take *of the leaves of Senna one ounce, dried Fumitory half an ounce, Dodder of Time two drams, Eybright, Germander, of each one dram and an half; Fennel seed two drams, Mountain Heartwort one dram, flowers of Rosemary, French Lavender, of each one dram and an half*: Make a Decoction in Goats Whey, infuse *Rhubarb two drams, Cinnamon, Spike, long Pepper, of each half a dram*; Or for the Flegmatick, *Agarick, Turbith, of each one dram and an half; Ginger half a dram, Salt Ammoniack half a scruple*, strain it; add *Syrup of Fumitory and Roses solutive, of each one ounce and an half*: Make a Potion for two Doses.

Let the younger sort drink for some daies only *Senna* and *fresh Fumitory* with *Fennel seed* diluted in *Goats Whey*.

They use also stonger Compositions, and those flegm purgers for the most part, because they thought all those affects did proceed from a defluxion of flegm, the which may be used if otherwise it abound in the Head, and also prejudice the Nerves, as we have said formerly in a Weakness of the Sight and Vertigo, from Flegm of the Brain.

We must make choice off, *Pilulæ Lucis, Arabicæ, Electuary Indum*, and others especially fitted for the Sight.

Of things taken inwardly which are appropriate to the sight and do help the Head and Stomach, we may make forms thus.

The which if we would use amongst nourishments let the Meats be often season'd with the following Pouders and Salts.

A profitable Aromatick Pouder with which the meats are season'd instead of other Spices: fitted for the sight: Take *of Cinnamon three drams, Cloves one dram, Nutmeg or Mace half a dram, long and black Pepper, Ginger, of each one scruple; Salt one ounce and an half*: Mix them.

Neither are Radish *or* Mustard so to be feared amongst Junkets; because as hath been shewed in the Remedies they help the Sight by a propriety, and being taken upon that account, they do good rather then harm.

The use of rapes boyled, especially with Caraway seed, as our Country men are wont to prepare them, is very convenient, because they are appropriate.

Eybright Wine, is wonderfully commended by all; which either is made simple by infusing the dried leaves of it in Wine or new Wine whiles it is hot; or that it may be more effectual and pleasing by mixing Wormwood and Fennel roots, because our Country men are rather delighted with Wormwood Wine, and *Dioscorides* reckons up Wormwood amongst the Sight-quickners.

Distilled waters must sometimes be taken, which may be prepared thus, profitable for that purpose: Take *of the waters of Rosemary flowers, the Herbs Fennel, Eybright, of each two drams; Cinnamon water half an ounce, Aqua vitæ two ounces, Lozenges of Sugar, of Roses as much as you please*, if you will; Mix them: let him take from *half an ounce* to *one ounce*.

More Compound waters: Take *of the fresh roots of Radish one ounce and an half, of Fennel one ounce, of Celandine, Avens of each half an ounce, the Herbs Eybright, Vervain, Rue, Celandine, Germander, Fennel, of each three drams; Time, Sage, Marjoram, Savory, of each two drams; Rosemary flowers three drams, of French Lavender, St. Johnswort, of each one dram; Fennel seed three drams, Mountain Hart-wort two drams, Caraways one dram, the Liver of a Goat sliced with the filth and Gall sticking to it half a pound, Cinnamon half an ounce, Cloves two drams, Nutmeg one dram, long Pepper one dram*: Bruise those things that are to be bruised and sprinkle them with white Wine, distil them, and let him take part of it by it self or diluted with other Water, if it inflame too much.

The Pouders which are taken in the morning by themselves or with a crust of bread dipe in Wine, or going to bed also, are made thus: Take *of Leaves of Eybright two drams, of Marjoram one dram, Rue half a dram, Rosemary flowers one dram, the seed of Fennel two drams, of Rapes one dram and an half, mountain Hartwart one dram, Caraways, Bay-berries, of each half a dram, Cinnamon one dram and an half, Nutmeg, Cloves, of each half a dram, long and black Pepper, Ginger, of each one scruple, Curral one dram, the Ashes of the Heads of Swallowes or Serpents half a dram, Sugar the double weight of them all*: Make a Pouder.

Lozenges may be made of this *Pouder* if you form *one dram* of that, with *one ounce of Sugar*, Dissolved *in Fennel Water*, adding *some drops of Oyl of Fennel*.

Which also being made *only with Oyl of Fennel mixt with Sugar*, are convenient here.

An Electuary shall be made of the same *Pouder* if you receive it in *Skim'd Honey*; Boyled *with Wine or convenient waters, or Sugar into the form of a Syrup*, with the same *Waters* in the same measure or more plentiful (if any one desire to have it so more grateful to the Palate.)

Or,

Or after this manner prepared of the Juyces, which are more effectual then the Leaves of the Plants: Take *of the clarified juyces of Fennel, Eybright, Vervain, of each one ounce and an half*; *Marjoram, Rue, of each one ounce*; *Honey boyled off with Wine six ounces*, or *so much Sugar*: Boyl them with the Juyces to a consistence; adding, *of the Conserve of flowers of Rosemary, Eybright, of each half an ounce*; *the flowers of Sage, and French Lavender, of each two drams*; *Nutmegs condite two, Cinamon three drams, Cloves, Nutmeg, Mace, of each one dram*; *long Pepper, Cubebs, of each half a dram*; *seeds of Fennel one dram and an half*; *Mountain Hart-wort one dram, the dried root of Celandine or its Leaves one dram, Species Diambræ, Rosatæ Novellæ, of each half a dram*: Mix them, make an Electuary.

Pouders or Confections to be taken after feeding or meat are allowed off, especially if Vapors also be troublesome; As, Take *the sugar'd confections of Fennel seed one ounce, Coriander, Annis, Carawaies, the seeds of Rapes or Turneps cover'd with Sugar, of each half an ounce*; *Rocket seed two drams*: Mix them, let him take one spoonful after meals.

Or, Let there be added *of Liquorish roots scraped half an ounce, Galangal sliced and Citron pill'd almost thinly sliced, of each one dram*; Cinnamon *one dram and an half, leaves of Eybright one dram, red Roses, Marjoram, of each half a dram*; Curral *one dram, shavings of Ivory half a dram, Species Diacytonites sine speciebus one dram, Sugar the equal weight with those things are not cover'd with Sugar*: Make a dry Confection.

The Remedies to be applied to the Eyes, if they do not too much affect them, are put into them, but if they be very strong especially when they are used upon a hazard, without any respect to the cause, they are more rightly applied outwardly to the Eylids least some new affect may be caused by them; and if they strain them, wash them again in the morning with Fennel and Eybright waters, which are made as followeth.

Of the Waters alone after this manner: Take *of the Waters of Eybright, Vervain, Celandine, Fennel, Rue*, Mix together, or Dilstilled together, equal parts, let him put it often into the Eyes, or let him wash them in the morning with these waters, adding sometimes a little Rose-Water,

If a darkness be from the thickness of the Coats the water of Honey is very convenient.

Or thus: Take *of the fresh Herbs of Fennel, Rue, Eybright, Vervain, Celandine, wild Lettice, of each one handful*; *flowers of Rosemary, Sage, Roses, of each one pugil*; *Fennel seed two drams, Mountain Hart-wort one dram, Juniper berries two drams, Cloves, long Pepper, of each half a dram*; *Sarcocol, Aloes Socotorine, of each two drams*; *Camphyre, white Vitriol, of each half a dram*; Bruise them and sprinkle them with a *Boys Urine and white Wine*; Till they are reduced into the form of a past; adding, (especially for a *Nyctalopy*) *the Liver of a He or She Goat sliced half a pound, leaving out the Gall, Hens Galls one dram, Honey of Rosemary flowers one dram*: Mix them and distil them for your use.

Waters or Liquors are made thus by long infusion without distillation: Take *of the juyces of Fennel, Rue, Vervain, Celandine, sour Pomgranates, wild Lettice, of each one ounce*; *of the filth which flowes from the Liver of a she Goat, while it is roasted with the Gall half an ounce, the Gall of Hens or Partridg one dram, Sarcocol steeped in the juyce of Fennel, Socotorine Aloes, of each one dram*; *Honey, Sugar-candy, of each half an ounce*; *Camphyre half a scruple, white Vitriol one scruple, Tutty one dram and an half, Pearl half a dram, Golden ducats two, long Pepper, Cloves, Ligneum Aloes, of each one dram*; add, *of a Boys Urine and white Wine, of each three drams*: Let them steep a long time in a glazed Vessel stopped, either in the Sun, or in a furnace, afterwards set them a part for your use.

Somtimes we anoynt the Eylids with juyces, or we drop them into the Eyes, after this manner: Take *of the juyces of Fennel, wilde Lettice, four Pomgranates a little thickend, and afterwards wrought with Honey*, adding somtimes *a little of the Gall of Fishes* or *Birds*.

Or which is good in a *Nyctalopy*: Take *of the filth which flowes from the Liver of a she Goat two drams, the blood of a Partridg one dram, a little Honey*: Mix them.

We use other liquors as followeth, let him chew Fennel seed and Juniper berries and afterward anoynt his Eylids with his spittle, and carry his breath upwards to his Eyes by holding his Hands before it.

Divers mixtures which they call *Collyries* are prepared thus: Take *of Tutty prepared two drams*; *Antimony often washe with Fennel water one dram, Curral one dram, Pearl half a dram, the Cacochymy of Gold half a dram, Sarcocol steepe in Fennel water one dram, Mirrh, Socotorine Aloes, of each half a dram, the apples of the Eyes of Fishes hardend by boyling one scruple, Swallows heads burnt half a dram, Lizards dung one scruple, Salt Ammoniack, white Vitriol, of each one scruple, Camphyre half a scruple, long Pepper half a dram, Saffron half a scruple, Sugar Candy two drams*: Make a Pouder like an Alcohol, receive it in the mucilage of Fenugreek seed, made with Rose Water; Make a Trochiske for your use; Dissolve one when we would use it, in the Waters of Fennel, Rue, adding the juyces, and somtimes the Gaules.

An Oyntment for the Eylids may be made after this manner: Take *of a Serpents fat, which is collected while it boyles, or of the Fish Thynnallus, or of them both, the juyce of Germander, Honey, of each equal parts*; *for an Oyntment*; *and there may be some of the aforementioned Trochisks* be mixed with it.

The Pouders which are strewed on the Eyes are used rather in specks of the Eyes, then here; yet they may be made of the Trochiskes described.

Or after this manner: Take *of the leaves of Germander, Eybright, of each one dram*; *Pearl, Tutty, of each half a dram*; *leaves of Gold three, Sugar-candy half a dram*: Make a most fine Pouder.

Somtimes the Eyes are fomented that the *Oxydoreical*, or Sight-quickning Medicines applied, may work the better: after the same manner as shall be said in the Specks.

Or after this manner: Take *of Fenugreek seeds half an ounce, Fennel two drams, mountain Hart-wort one dram, leaves of Eybright, Celandine, of each three drams*; *Radish roots half an ounce, Oate chaff one ounce*: Boyl them in *Wine* and *Water*, for a Fomentation in a Spunge, or in Bags.

Also the Vapor of this Decoction receive'd into the Eyes do prepare the Eye, or others also do good to the Eyes, as the steem of a Goats Liver boyled received by the Eyes in a *Nyctalopy*.

Barly Bread baked with Fennel and Caraway seed and cut in two while it is hot, and the Exhalation from it received by the Eyes.

Looking upon green things doth refresh the Eyes, and things polisht, as a bright Glass of Steel, upon which account the beholding of Jewels and Gold, rather then the Application of them, doth recreate the sight, and strengthen the vital spirit.

They cry up many Amulets that do good being hung about the Neck and worn in Rings which we purposely omit.

Mathiolus doth very much commend a stone of the Gaul put into the Nostrils.

Rhazes

Rhazes writes that burnt Ivory the quantity of a Lentil put into the Noſtrils with Oyl of Violets, doth quickly cure Nyctalopies.

The Cure of the defect of Seeing cauſed by the obſcurity of the horny coate by white ſpecks and by the obſtruction of the Grapy coate by white ſpecks.

A white ſpeck appearing more or leſs in the Eye, if ſpringing from the fall of the Glaſſy Humor or Cryſtalline in to the hole of the apple, it doth put out the ſight; which we have ſaid was ſomtimes wont to happen from a contuſion of that Eye, the hole of the apple being cleft, or the Coats containing theſe Humors in their place, being broken, or by too deep forcing the needle in curing a ſuffuſion, then all hopes of recovering the ſight being taken away, we will only fit the Cure to the external hurt if there be any. But if this white ſpeck preſenting it ſelf about the Region of the apple, be a ſuffuſion from the watry Humor by degrees and in a long time, converted into a ſhivel and at length into the ſaid Skin bringing firſt of all an error of the ſight but afterwards when it is hardned, a perfect blindneſs: or if from too much drineſs of the Horny coat, and induration of it, an Albugo doth proceed, or from a Wound or Puncture cloſed up there be a Skar left, which two laſt, as they are broad or narrow, they do more or leſs hurt the ſight, then what muſt be foretold and done in them all three, becauſe they do not much differ amongſt themſelves, we will explain altogether.

But ſeeing a Suffuſion, Albugo, and Skar, are difficultly cured, we muſt not raſhly promiſe any thing, ſeeing if the Skar be ſuperficial only, poſſeſſing the thin lap of the horny coat, it may perhaps be taken off in the younger ſort, and yet ſcarcely then, but if it be a little deeper it cannot be taken away, unleſs that being ſhaven, we would make a new ſolution of continuity, which were to make a Wound afreſh.

The ſame alſo we may affirm of an Albugo if it hath taken deep root; eſpecially if the horny coat being wholly hardened hath bred the ſaid darkneſs in old folks, or being dryed in ſome bright part of it only it doth cauſe an Albugo; the which how difficult it is to correct, we may ſee in the thin lap of ſome horn, Pecten, or Nail, affected in like manner, how it can hardly be wiped off: Yet if ſome portion of the groſer nouriſhment being left under the Horny coat do cauſe this, becauſe that doth ſomtimes change its place, and is carried from the region of the apple into the white of the Eye, then it no longer hurts the ſight, which for the moſt part happens rather of its own accord, then by the uſe of Medicines.

A Suffuſion alſo is a Pertinatious diſeaſe, which when it is confirmed and harden'd, makes blind, and can be taken away by no further Remedies, unleſs by a needle the which notwithſtanding when it is done, doth not help or ſucceed in all, but only in certain ſuffuſions as ſhall be ſaid by and by, and is often attempted with ill ſucceſs: that beginning which doth only caſt clouds before the ſight, can ſcarcely be prevented, but that it wil increaſe in time.

Nevertheleſs in theſe caſes Remedies muſt not be neglected, and in a Skar, Albugo, and Suffuſion, the Cure muſt be order'd thus, to wit that we diſpoſe the Body in general that we may rightly make the better Cure, and that we apply Topick means to the Eye, which may waiſt the Suffuſion by diſcuſſing it, the which alſo are convenient in an Albugo, the which notwithſtanding that we may be able to wipe away alſo from the thin lap of the horny coate, we muſt try to take away with ſtronger Deterſives, and the more ſtill, if there be a Skar in which the Deterſives wont to be applied in a confirmed Suffuſion muſt be uſed mixt with diſcuſſives; ſo that the ſame Remedies almoſt are convenient for them all, yet ſo diſtributed, that we uſe the thinner Remedies in a Suffuſion beginning, the thicker and ſtronger in an Albugo, Skar, and confirmed ſuffuſion, as you ſhall hear by and by, the external Pannicle doth require ſtronger yet, the which notwithſtanding muſt be ſo temper'd, that the Eye be not wholly dried up, or inflamed by the uſe of them, if all theſe things help not, we muſt come to cutting.

That the Body be clean and free from Excrements, we muſt procure by ordering a good courſe of Diet, and Emptiers, according to the Nature of a Plenitude or Cacochymy if there be any, for ſo the whol cure proceeds the righter: and though here many Practitioners do wonderfully macerate the Body with many Evacuations, in a Suffuſion eſpecially, which they thought was a deſcent of water into the Eyes, and therefore was to be called by the name of a *Catharrhaft*, by making Purgations was well by the Stool as by ſweats and by the Mouth and Noſtrils, alſo making Revulſions and Derivations, by Scarifications, Application of Cupping-glaſſes, and by Frictions, and then by Cauteries, Setons, as we have taught in a Flegmatick Vertigo, how theſe things ought to be done, yet we who have demonſtrated that the cauſe of theſe doth conſiſt in the Eye, and that a Defluxion of water can no waies be carried into the Capacity of the Eye, have many times ſeen and found by experience that theſe are adminiſtred to Bodies without any benefit, unleſs in as much as they may keep the Body pure, as we have ſaid; let therefore this preparation of the Body by a fit Diet and decent Evacuations ſuffice, being made of the ſame Remedies which have been explained in a Flegmatick Vertigo, chooſing the gentler or ſtronger as there is need, and fitting them to the conſtitution of the Body.

But neither can the Oxydorcical Remedies which are ſo much commended in this caſe being taken by the Mouth, or hung about the Neck, or otherwiſe applied do any thing ſingular here, unleſs they have that vertue of clenſing away and diſcuſſing the ſpeck, as many of them are endued with it, becauſe the ſight is here no other waies hurt, then that the Eye by reaſon of an Impediment ſpred over it, is deprived of the external light; that if we would mend the ſight with ſharpning Remedies; they ought to bring to the Eyes the brightneſs ruſhing from without, which certainly no man is able to do, or to take away the vail drawn over the Eyes.

We will propound therefore the more choice Topick Remedies that are convenient in theſe caſes, in this order, that the gentleſt be firſt deſcribed, then ſtronger, at laſt the ſtrongeſt of all which alſo are convenient in a Pannicle; the which are either put into the Eyes, if they can endure them, or are applied to the Eylids, where they retain them longer with leſs hindrance and hurt, eſpecially in the night whiles they keep them ſhut, and though their vertue doth not ſo quickly exert it ſelf, as when they are put into the Eye, yet by continual uſe, becauſe their faculty doth eaſily penetrate through the thin Eylid, they do work at length being thus applied, becauſe thoſe things which are put into the Eye, do by and by flow forth again with the Tears, or do irritate the Eyes, and create ſome trouble.

The Diſtilled water of Honey, is very profitable and accuſtomary, which is oftentimes drop't into the Eye.

Alſo

Alſo that called the Water of Wine, or Aqua vitæ, doth diſcuſs Egregiouſly, but it muſt be tempered with Water of Honey and Fennel, added to it in equal portions.

A more effectual one will be made thus: Take *of a Boyes Urin four ounces, white Wine one ounce, Honey one ounce, Gaul half an ounce*: Extract a Water.

Or yet a ſtronger: Take *of a Boyes Urin four ounces, the juyces of Fennel, Celandine, of each two ounces, white Wine one ounce, the Gaul of Fiſhes* (as *Salmon* or *Carpe*) *or of Birds or of other creatures two drams, Honey two ounces, Turpentine half an ounce, live Sulphur two drams*: Diſtill them, if the Urin before it be added to this compoſition, ſtand for ſome daies in a braſs Veſſel, afterwards waſhing the Veſſel foundly with it, the preparation wil be yet more effectual, which if it bite, being temper'd and thicken'd with the white of an Egg, anoint the Eylids with it. Somtimes ſuch a Pouder is blowed in, but it ought to be very fine as an Alcohol, that it do not exaſperate the Eye: Take *of the Bone of the Fiſh Sepia of the Fungous matter of a Pummyſtone, of each two drams; white Pompholix*, (which is the ſoot from Braſs) *half a dram, Sugar candy two drams, Bean flower half a dram*: Make a Pouder.

The juyce ſweating forth from Willows, being dropt in the Eye, is very much commended.

Of Acid juyces theſe are very convenient: Take *of the thick juyces of unripe Grapes, alſo of the juyce of four Pomgranates thicken'd*, receive them in the *Mucilage of Fenugreek ſeed*, apply them to the Eylids.

Or thus, one more diſgeſting: Take *of the juyces of the leſſer centory, Fennel, Celandine, of each two drams; the Gaul of Fiſhes one dram, Aloes, Sarcocol, Mirrh, of each half a dram; Sugar candy one dram, Honey as much as is ſufficient*: Make an Oyntment.

Or thus, one Egregiouſly abſterſive: Take *of Lizards dung one dram, the bone of the Fiſh Sepia burnt, Hart-horn, Maſſazinnia, of each half a dram; Honey as much as is ſufficient*: Make an Oyntment.

Or without Pouders but very effectual: Take *of the juyces of Fennel, Celandine, foure Pomegranates, of each half an ounce, of Onions, Radiſh of each two drams, Gaul one dram and an half; Lizards dunge half a dram, Honey as much as is ſufficient*: Mix them.

Or make ſuch an Unctuous Oyntment: Take *of the fat of the Fiſh Thymallus two drams, of Gaul one dram, Lizards dung one ſcruple, Gum Ammoniack diſſolved in Aqua vitæ one dram, Sarcocol half a dram*: Make an Unction.

Acrid Liquors that work vehemently are made thus, which if the Eye cannot endure, they are temper'd with Milk or Waters til they can bear them, or being mixed with the Mucilage of Fenugreek ſeed or the white of an Egg they are applied to the Eylids: Take *of Antimony one dram, Marchaſite half a dram*: Pouder and infuſe them in *Roſe and Fennel Water, of each four ounces*; often paſſing it through a Filter; for your uſe.

Out of Urin thus: Take *a Boyes Urin, let it ſtand in a Braſs Veſſel*, for ſome daies; ſcraping or rubbing the Veſſel often, for your uſe.

Or a linnen cloath is ſet one fire in a diſh or on a Tin or Iron plate, and the juyce which ſticks to the diſh is taken for uſe; this juyce will be more effectual, or rather that Oyly ſubſtance ſweating forth, if the cloth be firſt wet with the ſpirit of Wine and be dried again, but afterwards be lighted and burnt on a Plate of Steel.

Of thoſe ſtronger yet tis made thus: Take *of white vitriol one dram, ruſt of Braſs ſix grains*, being pouder'd; Mix them with the white of one Egg, beat them well, and pouring them upon a Paper, the greeniſh water collected by inclination is taken for your uſe ſo far as it can be endured, it is temper'd with Roſe water or Milk.

A moſt effectual Oyntment is made thus: Take *of white Vitriol one ſcruple, ruſt of Braſs half a ſcruple, Antimony half a dram, Marchaſite half a ſcruple, Lizards dung half a ſcruple, the Bone of the Fiſh Sepia half a dram, Camphire two grains, Fiſh Gauls half a dram, Honey two drams, Sugar one dram, with the mucilage of Fenugreek ſeed*: Make an injection.

Somtimes a Fomentation of the Eye being made, before the uſe of theſe, it cauſeth that they work more rightly, and doth the better diſpoſe the Eye to receive them, and it diſcuſſeth alſo by it ſelf.

Which may ſimply be made thus: Take *of the ſeeds of Fenugreek one ounce, of Fennel two drams, Chamomel flowers, Oate chaff, of each one handful; Marſh-mallow roots one ounce*: Boyl them in Water and Wine for a Fomentation.

A Suffumigation from this Decoction if it be received in the Eyes, will be inſtead of a Fomentation.

To breath into the Eyes after the chawing of Fennel ſeed doth the ſame; and in Infants if the Nurſe do that it wipes away their Suffuſions if they firſt chew Gum Ammoniack and the like.

Amongſt Amulets the roots of Garlick, and Snake-weed, hung about the Neck, is in high eſteem with Chyrurgions.

By Manual operation or Chyrurgery, in a Suffuſion when it is grown to a Skin or Web as they call it, to free and divide it from the compaſs of the apple, to which it is grown, by putting in a Needle through the horny Coate, and by degrees forcing it to this part, is the laſt remedy: which if it ſucceed, and the ſight as yet be in the Eye, as the Chyrurgeons ſpeak, that is, if by reaſon of that long continued blindneſs which hath laſted ſo many years, the Viſory ſpirits as hath been ſaid formerly being idle, be not extinguiſht, or the Optick Nerves become ſluggiſh: then this way being open'd, and its obſtacle taken away, the light again entring and Illuminating the Eye, it cauſeth that in that very moment, in which the Web is taken off, they recover their ſight again.

But before the operation be began, theſe things muſt firſt be conſider'd, firſt of all that if both Eyes being cover'd with a Web they are render'd wholly blinde, by ſo much the rather let it be attempted, becauſe worſe cannot befal them, although the operation do not ſucceed they then remaining blind as they were before; but if that one Eye only be affected, the other being ſound, becauſe that is ſufficient for ſeeing, and no greater neceſſety urgeth, the buſineſs is not to be attempted with ſuch raſhneſs.

Next of all that we do not attempt it before the Skin be wholly concrete and perfect, and as they call, it be ripe. Which ſomtimes is ſcarce compleated in the ſpace of three years, ſomtimes five, or more, and it is known by the color of it, which then is exactly white like to the thin Skin compaſſing the white of a boyled Egg, although ſomtimes it repreſent ſomwhat an aſh color, and then becauſe it doth ſomwhat deceive the judgment, it makes us more uncertain as concerning its Maturity, the which notwithſtanding is known by this to be now perfect, becauſe it is not changed, but perſiſts ſo for a long time. And although many do not require its abſolute, but moderate concretion, yet we have found by experience, that there is leſs error, and tis more eaſily handled when it is perfectly concreted: for that which is unripe, becauſe it is yet ſoft and ſnivelly, it doth not reſiſt the point of the Needle, and therefore cannot wholly be removed, but being cut and divided grows together again, and then being made thicker and more Callous and Sprinkled over the watry

humor, it cauſeth that then they do not only ſee nothing, but all hope of Cure by a new operation is taken away, becauſe if it be done twice, for the moſt part it is done in vaine,

The which happens alſo, if the Needle being forced too deep, the Cryſtalline or Glaſſie Humor be hurt, or their Coats, or alſo the Grapy Coate it ſelf be toren in the compaſs of the hole, for then the humors being confounded, they remain blind and a whiteneſs with a Tumor appears in the black of the Eye.

Therefore it is a very doubtful kind of Remedy in doing of which they eaſily err, or if it ſucceed rightly, yet by reaſon of a long continued blindneſs, as hath been already ſaid, ſomtimes the ſight doth not return, wherefore we muſt promiſe nothing raſhly as *Mountebank Oculiſts* do, who are nothing moved with ſhame, although they perform not their promiſes, if there be any hopes of gain.

Yet neceſſity urging, if they be altogether blind, imploring Gods aide, and applying all diligence rather then promiſing ſafety, the operation ſhall be thus perfected as I have oftentimes ſeen it, and in part have my ſelf put a hand unto it, ſeeing the thing otherwiſe hard, if you conſider the Induſtry and Art, is not ſo very difficult as they make it.

Let therefore the Patient ſit in a ſeat, and over againſt his Face, the Chyrurgion ſo neer that he may receive the Patient with his ſeat between his Thighs ſpred abroad, and let him bear up his hands leaning on both his Thighs, but let a Servant ſtand at the back of the Patient and hold his head raiſed up, faſt with both his hands and if one Eye be ſound and ſee, let him binde it with aſwath, that he ſee not.

Which being done, firſt of all let the unſound Eye be rubbed, the Eylids being ſtretcht above the Eye, the Chyrurgion for a while drawing it up and down with his Thumb.

And let him often breath into the Eye being open'd, having firſt chewed Fennel ſeed.

Then take the Needle which they will have of Silver for brightneſs ſake more then for profit, and ſo much the more if the point of it be guilt, the which ought to be long and with a wreathed handle that it may be held the faſter, and towards the point, ſharp and thinner by degrees: But alſo a common Iron Needle of a mean ſize faſten'd in a handle that it may be held faſt, is as commodious for doing this, neither is there any ruſt to be feared in this ſhort ſtay as they imagine.

This therefore being taken in the right hand if the left Eye be affected, or in the left hand if the right Eye and leaning the hand by the ſeat of the Eye, in the outward ſide of the Eye, looking towards the middle ſeat of the Apple, in the white of the Eye ſomwhat diſtant from the circle, it ought to be impreſt into the Horny Coat, and not violently thruſt in, but wreathing it by degrees, til it penetrate that coat. The which becauſe it is done without any pain, they eaſily ſuffer and remain quiet, and becauſe the Eye is faſtend to the Needle it is kept firme by it, and it is prevented from rowling.

The Needle being thruſt in, by and by is directed towards the Apple, and is forced ſo far, that comming forth in the brink where the Skin grew to it, tis ſet before the fore part in the mid'ſt of the Skin, the which is done by ſo much the more commodiouſly, becauſe the Needle may be ſeen there, through the horny Coate, and thefore may be directed right. Being carried thither; 'tis ſo ofttimes preſt gently backwards, that it may break off the Skin from the compaſs of the hole of the Grapy Coate, if it ſucceed not at the firſt time, and if it be any where freed, 'tis wholly ſeperated by the Needle from the hole where it yet ſticks, and is depreſt downwards from the Region of the Apple, into the loweſt obſcure part of the Eye. But others endeavoring to free it with the Needle, firſt of all from its upper part, and by degrees proceeding downwards, do after this manner force it to the lower parts. Which both waies may be rightly done, and as the Skin follows they muſt be order'd, or as they are eaſier done after this or that manner. Taking care chiefly that the Web peirced through be not cut in many parts, for ſo thoſe portions of it, though preſt down being eaſily again carried upwards before the Apple, by floating there would darken the ſight; the which if the whol Skin thruſt down doth do it, it muſt be depreſt again, leaſt if that ſhould come to paſs when the Needle is drawn forth, the Puncture muſt be repeated again, which would be inconveniently done, and for the moſt part with out ſucceſs.

Which being rightly performed if it ſucceed well, the Apple appears black again, and they ſee preſently, but otherwiſe there will be little hope, but howſoever it be, the Needle muſt by degrees be drawn forth again, the Eylid being firſt depreſt and the Eye ſhut. Neither is there any fear of the watry Humor flowing forth, becauſe the hole in this thick Coate doth by and by cloſe again, after the drawing forth of the Needle.

Then thoſe things which do repreſs an Inflammation of the Eye muſt be applied with a four doubled cloth dipt in the white of an Egg, being firſt beaten with Roſe water, and other things to be mention'd in an Inflammation; and they muſt alwaies be renewed three times a day for the ſpace of five or ſix daies, and the firſt Application if it ſtick faſt, when it hath been firſt mollified in the ſame humor, it muſt be taken off, and a new one applied, to which if you add milk it will ſtick the leſs.

At which time, that the Eye not yet accuſtomed be not overwhelmed with ſuddain and much light, they ought to ſtay in darkneſs, and by degrees to accuſtome the light. And leaſt that the ſpirits may be forced to the Eyes by violence, they ought to have a care off all vehement motion of the Body, as Coughing, Sneezing, Crying out, and off vehement ſtraining in caſting forth their Excrements and the like other things.

The Cure of the defect of ſight from the horny Coate cover'd with a Pannicle and Unguis.

A Pannicle beginning, ſomtimes may be hinder'd that it increaſe not being increaſed it ſcarce yeilds to Medicines though moſt ſtrong; it may be cut off if it grow not to the horny Coate; if it be harden'd like to a Nail, it yeilds to no Remedies.

In the Elephantiacal, as neither the Diſeaſe, ſo neither can this part of that Diſeaſe reſiding in the Membranes of their Eyes be taken away. Yet ſomtimes it may be hinder'd that they be not wholly made blinde, which of all things which otherwiſe they ſuffer is to them moſt miſerable.

The Cauſe which is an afflux of blood we will endeavor preſently at the beginning to draw forth, Revel, Derive, by Bleeding, Scarification, Setons, Cauſticks, that the evil do not encreaſe, alſo by a ſlender courſe of Diet, and many Sweats and Purges, fit for a foul body.

The Topick Remedies ought to be vehemently drying, and unleſs they help, they muſt at laſt be corrodeing.

We muſt make choice of the ſtrongeſt of them which we ſaid did cleanſe away white ſpecks, and thoſe which we commanded to be applied to the Eyelids here muſt be laid on the pannicle it ſelf, and Powders ſeeing they

dry

dry more ſtrongly, muſt be laid on the Pannicle it ſelf, not neglecting the more liquid mixtures which we drop into the Eyes; in the interim applying certain things to the Eyelids that they may do good by turns, and ſomtimes alſo applying a Fomentation to prepare the Eye, as hath been ſaid there.

We may uſe at the beginning the pouder above mentioned in the white Specks, then we muſt proceed to a ſtronger; the which yet muſt dry without biting, and therefore it ought often to be repeated; which ſhal be made thus, Take *of Curall, Tutty, each one dram: Pummy ſtone, Egg-ſhels, each half a dram; the ſtone of Dates and Myrobolans, each two ſcruples*; make *a moſt fine Pouder* if it be ſprinkled with *Vinegar*, or *Urine*, and dried, it will be *more effectual*.

Or thus a ſtronger, Take *of the pouder of Diarrhodon Abbatis one dram, the bone of the Fiſh Sepia burnt, Lizards dung, each half a dram; the Bloodſtone two ſcruples, Sugar Candy* make *a Pouder*.

A ſtronger yet, Take *of burnt Lead, Antimony, the ſtone Calaminaris, each two drams; Tutty, white Lead, each one dram and an half; the aſhes of Horſtail, the bone of the Fiſh Sepia burnt, each one dram*; make *a pouder* waſh it with *Smiths aſtringent water*, and dry it for your uſe.

Mixtures are made thus, Take *of the compound water* deſcribed in *the white Specks* diſtilled with *Urin ſteeped in a Braſs veſſel*, and to *ſix ounces* add *the pouder of Nabath Lizards dung, the bone of the fiſh Sepia, each half a dram*; being poudered mix them firſt in *Mucilage of Fenugreek ſeed made in the foreſaid water* and uſe it.

Or a thicker after this manner, Take *of the juyce of unripe Grapes, and Lees of Oyl, and of ſour Pomegranates dried each two drams*; add of *the pouder of the bone of the fiſh Sepia, and Lizards dung, each half a dram*; mix them.

Or thus, Take *of the pouder of Nabath two drams, Tutty prepared, White Lead waſhed, each one dram; the bone of the fiſh Sepia burnt and waſht half a dram, Sarcocol, Myrrh, Aloes, Lycium, each one ſcruple; the Gaul of Birds or fiſhes two ſcruples*, mix it with *Honey and the white of an Egg*, for an *Oyntment*.

Of corroding Compoſitions, that is convenient which in the white Specks is prepared of Vitriol, the ruſt of Braſs, Antimony, the Marchaſite.

Or a Colliry of Coppras, but applied warily, becauſe it is ſtrongeſt of all, and 'tis made thus. Take *of burnt Braſs, Coppras, each half a dram*; *Ruſt of Braſs two drams, Salt Ammoniack, Niter, Arſnick, Sublimate, each one dram*; make *a moſt fine pouder* poudring it much and long; mix it *in the mucilage of Gum Tragacanth* make *Trochiſks*, one of which diſſolve with *the Mucilage*, and apply it warily.

Rondoletius commends *the pouder of Precipitate*, I have often uſed my *Cauſtick* which at firſt time burns, but preſently abates.

Manual operation is made two waies, by Ligature, and by Cutting.

If the Veins which nouriſh the Panuicle be bound about the roor, then the growth of that fleſh muſt needs be hindred, or if it be already grown, it muſt needs wither, which may be done with a crooked Needle thruſt under the Vein drawing the thred under it and tying it; this if it be made of Silk, or of a Briſtle, or of a Womans hair wil be more commodious, becauſe then it ſcarce putrifies.

Alſo if thoſe veins be opened that the blood flow forth, and it be often repeated, the ſame will be effected.

The Pannicle is cut off after this manner, as I have ſeen it done, the Patient is placed in a chaire, and the Eye is firſt prepared, as hath been ſaid in the cutting a ſuffuſion, then a Needle containing a ſtrong thrid is thruſt through under the *Panicle*, yet ſo that it hurt not the Horny Coate, and laying hold on both the ends of the thrid drawn under it, drawing it a little way upwards, tis raiſed from the horny Coate and afterwards is cut from it with a ſharp Razor, or Knife, by degrees and warily, that the horny Coate be not hurt; the which being done if the black of the Eye appear clear, the ſight returnes: But if otherwiſe, or that the Pannicle hath ſo grown to the horny Coat, that it cannot wholly be taken from it, the operation wil be in vain.

Section being made, the pain will be allaid in the ſame manner, as hath been ſaid, in the cutting of a Suffuſion, and that it be not generated again anew, it will be prevented by cutting of the Veins of the adnate coat if they ſwel again, and laying on drying things, and leſt the Eye, if by chance it were ulcerated ſhould grow to the Eye-lid we ought to hinder it by often moving the eye.

If the bright part of the horny coat be poſſeſt with a ſtrange humor ſo that either a depravation or darkneſs of the ſight doth follow, than if choller which in thoſe troubled with the Jaundies is wont to dye the white of the Eye, and what is more rare doth make a yellow aſpect of all things be carried thither; that vaniſhing of its own accord this fault ceaſeth, or it is taken away by ſome abſterſive Lotion, as ſhal be ſaid in the Jaundies.

The Cure of the darkneſs or depravation of the ſight from Choler, Blood, or matter, in a hypoſphagma and hypopyon.

But Blood being poured forth into the Diaphanous part of the horny coat if that Depravation of the ſight doth happen, in which all things appear Red, or Livid in the ſaid Hypophagma, or if it penetrate the horny coat alſo, and under that concrete by the hole of the Apple, or being converted into matter in the ſaid Hypopyon it darkens the ſight, then the cure muſt be ordered thus.

If there be Pain and an Inflammation be feared by reaſon of a blow from which commonly theſe proceed, then preſently at the beginning we muſt uſe, bleeding, and Repellers, and things that allay pain; and if that it being long retained do ſuppurate, and whiles the matter is generated there ariſe pain, the horny coat being affected, and then alſo the adnate coat by conſent, the ſame muſt be done for fear of an Inflammation, otherwiſe if there be no pain we muſt abſtein from Repellers ſeeing they condenſe the blood more; and by and by we ought to apply our care to digeſt and diſſolve that blood, which although it be converted into matter muſt be done nevertheleſs, if part of it can be conſumed, ſeeing the greater part of the matter being reſolved, that which remains ſinking downwards from the hole of the Apple can then no longer prejudice the ſight, and at length 'tis waſted either of its own accord, or by uſe of Medicines.

But 'tis diſcuſt after this manner, you muſt take the blood of Pidgeons, Turtles or other Birds, and that while it is yet hot muſt be caſt into the Eye, or if a young Pidgeon be at hand, we muſt pul a feather out of his wing whoſe ſwelling root becauſe it is newly grown is filled with blood which is contained there in its proper Vein as in an Inteſtine, and the blood muſt be preſt out of that, and dropt into the Eye, for how much power blood hath in diſcuſſing of Blood we have taught elſewhere, in Hæmorrhages that are to be ſtopt by blood of this nature.

Stronger diſcuſſives may be put into the Eye if it yeild not to theſe, ſuch as are explained in diſcuſſing a

Suffuſion

Suffusion, made of Waters, Juyces, Gums, Gauls.

To whice also we add these approved by their effects. Take *Aqua vitæ* (which also doth wonderfully discuss *Black* and *Bleumess* elswhere) *Radish water, each half an ounce*; dissolve *of Camphire* (which doth the same in discussing as *Aqua vitæ*) *five grains*, drop it in.

Or thus, Take *of Radish water one ounce*, steep *in it Saffron half a scruple*, til it looks yellow, strain it and dissolve in it *Frankincense one scruple, Fish gaule half a dram*, use it *by it self* or apply it with *a Mucilage*.

Or a thicker to anoint the Eyelids may be made thus, the which also may be put into the Eyes, Take *of the juyce of Radish two drams, Fish gaule half a dram, Myrrh, Frankincense, each one dram*; *Saffron half a scruple*, mix them with *a sufficient quantity of Honey*.

Or thus, chiefly in the declination, Take *of sour Grapes, Lees of Oyl, each two drams*; *Myrrh half a dram, Saffron half a scruple*, mix them with *Honey*.

Or wholly to discuss it, the Compound waters explained in Suffusions are convenient, by themselves, or applied with a Mucilage.

Fomentations also shal be applied which do very much discuss, such as we have prescribed in Suffusions.

Or this which is very powerful, Take *of Radish roots half an ounce, Fenugreek seed one ounce, Fennel, Hartwort, each two drams*; *the herbs Fennel, Celondine, Eyebright, each one handful*; *Flowers of Chamomel, Melilot, Elder, Lillies, Oat chaff cut, each one pugil*; make *a Decoction in Wine and Water* for *a Fomentation*.

Plasters laid upon the Eye to discuss are of force, amongst which this is the best; If the Lungs or Liver of a Pidgeon being yet bloody and warm be placed and bound on the Eye, which if Pain and Inflammation also were present, upon that account also they would do very much good, as shal be said in an Opthalmy.

A Plaster also is made of a Rotten Apple profitable for discussion.

Or Compounded after this manner, Take *of Radish sliced one ounce, the pulp of a rotten Apple half an ounce, Pulp of Raisons one ounce, Pidgeons Dung half a dram*, bruise them with *the Mucilage of Fenugreek seed*, mix them with *Milk*, and apply them.

A Suffumigation from the Decoction of the Fomentation prescribed, wil also discuss very much.

Manual Operation also takes place here, if the matter that is generated do not yeild to Discussives, and there be great plenty of it, which blots out the Apple, which may be attempted by Puncture as hath been said in a Suffusion, but with a greater Needle seeing otherwise nothing would flow forth; and if it succeed not, by thrusting in a bigger yet, but in the same hole of the Puncture, or by putting in a hollow pipe so sharp that it may enter the same hole and so by sucking out the matter, so long til the Apple be in some sort freed from it, for if we would draw forth all the matter 'tis to be feared that the watry humor may follow. For that sucking, the Instrument or Pipe must consist of a large Belly that the matter suckt up may be carried into that and not into the mouth of him that sucks, such as Chymists are wont to use, for the sucking of Waters or Oyls in seperating them one from another.

CHAP. VIII.

Of the hurts of Hearing.

The Kinds,

Deafness. SOmtimes the Hearing is wholly abolisht, so that either they hear not outward sound at all, or if they receive any sound at their Ears, yet they cannot discern the differences of it, and therefore cannot judg what it signifies and this is called Deafness, *Cophosis*; and these are oftentimes Dumb, if they be born Deaf, and then it is an Original Deafness. Yet of Deaf folks, some of them can after a sort, hear themselves speaking, but others not all: and there have been also found, those who otherwise being Deaf pressing a Musical Instrument while it soundeth with their Teeth, and biting some part of it, or only some other part contiguous to it, could apprehend that sound. Which may happen not only to those that hold a Pipe in their Mouth, and Piping, but to those also who hold fast with their Teeth, patt of another Instrument which consists of strings, whiles it is plaid upon. And in like manner it happens also to those that are sound, if stopping their Ears diligently, that they can hear nothing that way, they do the same thing, as every one may make tryal of it.

Thick hearing Baryceia.

But it is impaired only when they can hardly perceive or discern a sound, in thick hearing called *Baryceia*, because they do not hear or understand a sound unless it be very high and lofty, whence they that talke with them, are forced to lift up their voice, and somtimes call aloud, but others cannot thus perceive their voice, unless those that talke with them, speak and cry aloud into their Eares.

Obaudition, that is, a sound in the Ears.

A Depraved hearing, or *Obauditi-on*, is when it perceives the external sound falsely, and that by reason of an internal sound preternaturally raised in the Ears, outnoising this external sound, or mixing it self with it, and confounding it, and that either continually, or only by fits, besides which Impediment it breeds no smal trouble to a man, and makes him unquiet.

But this sound raised in the hollow of the Ears varies very much, and as the outward sound is various, so is this also, the diversities of which, as of that cannot otherwise be rightly explained, unless by comparison, and names are given to them almost by an *Onomatopœia*.

A tinkling of the Ears is a species of Obaudition.

And one Species of it, is more frequent, which is called a tinkling of the Ears, when that sound doth expres in the Ears the noise of a little Bell, for the most part gives a shril sound when it is struck upon, and as the Names sounds, it tinkleth.

Hissing a sort of Obaudition.

Another is a Hissing of the Ears, a sound which is heard, and yet not rightly resounding, as (*si*) the first syllable of the word sounds, and as wind when it passeth forcedly through a narrow hole.

A Pulsation in the Ears is a sort of Obaudition.

A third Species is a Pulse, or Pulsation in the Ears, a sound such as offers it self, whiles a thing is lightly beaten upon by a blow or fall of a drop of

water

water by courſe, and the firſt ſyllable of the Name (*Pul*) doth ſeem alſo ſomwhat to ſignifie it.

A Fluctuation in the Eare is a ſort of Obaudition.

A fourth is a Wave, or Fluctuation in the Ears, a ſound not unlike to that which is from Waves ſtriking one againſt another, or againſt other things, cauſed by intermitting courſes, which alſo the beginning of that word (*Flue.*) doth Elegantly expreſs.

Beſids theſe ſounds, thoſe which offer themſelves after another manner, or are made by a mixture of theſe, they are called by a general name, a noiſe in the Eare.

The Cauſes.

The part affected.

Every cauſe of the defect and depravation of hearing is either in the part ſending as the Brain, or in the Inſtrument receiving as the hollow of the Eare.

The hurt of hearing, from a fault of the Brain.

A general fault of the Brain as it brings hurt to the reſt of the ſenſes, ſo alſo to the hearing, and if it ariſe in particular, about the beginning of the Auditory Nerve or its progreſs into the Chamber of hearing it doth prejudice the hearing rather then the reſt: and this befals it either by proper fault, ſome Diſeaſe, or weakneſs of it, or by conſent, by reaſon of Vapors, or its proper object.

A grievous and vehement Diſeaſe of the Brain, proceeding from a cold Diſtemper, Repletion, Eminent hurt, as it doth either aboliſh or debilitate the reſt of the ſenſes, ſo alſo the hearing. The which alſo oftentimes happens from a weakneſs of the Brain, the ſpirits being waſted and diſſipated by reaſon of old age, or of a great Evacuation, or ſome grievous and long continued Diſeaſe, that even as the ſight is hurt upon this occaſion, ſo alſo the Hearing is weaken'd. All which how they come to paſs, hath been ſaid in a Weakneſs and Conſternation of Minde; alſo a hot diſtemper of it as it is wont to deprave the Minde and the Sight, ſo alſo in raving it doth not only offer various apparitions to the Eyes; but alſo it repreſents ſounds to the hearing which they think they do hear; eſpecially as ſhall be ſaid by and by, the Arteries then beating vehemently in the Ears.

From a Vapor, not yet breaking into the Chamber of the hearing (as ſhall be ſignified by and by) But affecting the Brain, as the Minde is depraved, and falſe imaginations are offer'd to the ſight, ſo alſo if it trouble that part where the Auditory Nerve comes forth, it may repreſent falſe ſounds to the hearing for the ſame reaſon as hath been ſaid in the error of Sight.

As we have ſaid the ſight is affected with its proper object, ſo alſo the Nerve being offended and the ſpirits diſſipated by a violent and too great ſound, penetrating ſuddainly and abundantly through the Eare, even to the Brain, ſomtimes Deafneſs hath enſued, or the Spirits returning, but not ſufficiently, a tinkling in the Ears hath been left: which ſound alſo if it be cauſed with a greater violence, may bring dammage alſo by hurting the Organ of hearing as ſhall be ſaid by and by.

The hurt of Hearing, from default of the Eare.

By default of the Auditory Inſtrument, that receiveth that outward ſound, the Hearing is hurt divers waies, becauſe this Organ alſo which we cal by the Name of the Eare, is compoſed of many parts, as Membranes, little bones and the Auditory Nerve, all whoſe ſeveral faults may prejudice the Hearing. Which we will explain, not as we have done in the Eye, beginning with Particular parts and aſcribing their faults to them, but diſtinguiſhing the whol paſſage of the Eare into two Cavities, *viz.* the outward and the inward, we will ſet forth what Diſeaſes occurring in them both, do hurt the Hearing.

The outward Cavity of the Eare, which they call the Auditory paſſage, being Extrinſecally open wide and Conſpicuous, ending even at the Membrane of the drum, with which it is ſtopt, containing nothing otherwiſe in it ſelf beſides Aire, and admitting the outward ſound, if it be ſtopt up or obſtructed by divers external Cauſes occurring, or by internal Humors, or Tumors, whether wholly or only in part, or it be otherwiſe hurt, then it happens that the Hearing is hurt; which cauſes alſo occurring here, can only be perceived by our ſenſes, or if they lurke more inwardly, they may be ſearcht out by putting in a Probe, and if any thing come forth from thence, they may be known by that voided forth.

A ſtopping of the Eare, is the Cauſe of the hurt of Hearing.

If the outward Cavity of the Eare be wholly ſhut up by external Cauſes (which otherwiſe naturally can no waies be ſhut as the Eye) as it comes to paſs the hindermoſt Cartilage of the Eare being preſt, either by Application of the Hands, or of other Bodies, or by the water whiles in ſwimming the Head is cover'd in it; or the Eares being obſtructed by ſome groſs matter thruſt in, or fallen in, as by a Kernel, or by ſome living creature which do wholly ſtop up their Cavities; or by water which fallen in, doth wholly fil them up; the Hearing is ſo hinder'd, that they do not perceive the outward ſounds either at all, or not rightly, as one Eare or both, are more or leſs ſtopt. Unleſs perhaps that ſound be ſomwhat perceived another way, and by another Artifice, as by the Mouth, we have ſaid may be done, holding an Inſtrument in their Teeth, that gives a ſound. Which we think happens upon a double accoant, both by reaſon of the Similitude and Conſent of the ſubſtance of the Teeth, in hardneſs, which is almoſt ſtony, and in ſmoothneſs, with the Bones of the Chamber of Hearing (which bones are very like to the ſubſtance of the Teeth, and that the ſound might be the better cauſed in them they are moſt hard and ſtony) and ſo with the little bones of the Hearing it ſelf, endued with the ſame ſubſtance; and by Reaſon of the Nerves lying under the Teeth, which are carried thither from the Nerves of the Tongue, and the Nerves of the Tongue are mutually conjoyned with the Auditory Nerve in their branches (as we ſhall explain hereafter for what reaſon the Deaf are alſo born Dum) by which conſent it comes to paſs, that becauſe the ſound through the Aire doth beat upon the Teeth by contract, this continuation being made through the inner parts, it is perceived by the Ears: as alſo the Mouth being exactly ſhut, and the Teeth ſet one againſt another, or the Tongue forced to ſome part of the Mouth, although the Eare hear not extrinſecally, yet we perceive the ſound through the inner parts; and alſo by reaſon of that conſent of the Teeth with the ſubſtance of the Organ of Hearing, we ſee that by a harſh noiſe, made by the rubbing together of rough things the Teeth are offended even without contact. Hither perhaps it makes ſomwhat, that as the ſtrings of one Inſtrument being play'd upon, we ſee the ſtrings ſcrewed up to the ſame tune in another Inſtrument, are moved though it be far diſtant, ſo that if any thing be

laid upon them, either it trembles, or if it be light, as Chaff, it fals off, so also the Drum being retcht to receive all impulses of sounds, being struck by a continuation made through the intermediate teeth and Nerves doth represent the sound to the hearing; of which many things might be disputed, but to our business.

But though the Ear being wholly stopt, the outward sound be no waies perceived, yet some sound nevertheless is sometimes felt in the Ear; which first of all is wont to happen by reason of the Air which hath remained in this Cavity of the Ear and doth more or less force and beat upon the Drum; and it is by so much the greater, by how much the Ear, though it be stopt, yet being less filled with strange matter, doth contain in it self more plenty of Air, whence is perceived a waving sound, the air rouling it self and as it were fluctuating in the Ear, hence we see, that if that which is hollow be applied to the ear and therefore contains Air in it, this sound in the ear is felt more vehement, which we experience by applying the hollow part of the hand to the ear, whence Children are wont to relate that pressing a Sea shel to their ears they hear in it the waves of the Sea, the air then making a greater noise by reason of the winding in the Skul: the which also happens the head being plunged in the water, so that the ears be wholly stopt up by it, the air then remaining, which offers a sense of fluctuation; and I have oftentimes observed, when being a Boy I was delighted with swimming, that if a noise were made under the water by moving of the Stones, that that also was perceived like the tinkling of a Bel, although the greatest sound made out of the water even from a Gun shot off, could by no means be heard; and also by reason of the Pulsation of the Arteries in the ears, a beating sound is somwhat felt in them when the ear is stopt, which is not taken notice of when the ear is open, by reason of the outward sound, seeing it is greater, and doth obscure and drown this lesser, the which also many relate that they hear in the night, if they bind their ears too streight with a Cap and wrap them up in a pillow, especially if their head being somwhat hot, doth cause a vehement pulse, and that in Diseases it doth preternaturally cause trouble, we shal by and by explain.

Ill hearing from things fallen into the Ears.

But if the Cavity of the Ear be not wholly shut up, by the forementioned external Causes so that the outward sound entring them nevertheless be heard, and yet there is a hurt of the hearing not only because it is impaired but depraved, seeing the Ear doth hear that sound made in the Ear keeping a Noise, from every inward Contact, not only of the Drum, but also of the rest of its Cavity, which according as the Contact is becomes various; for that which is the passage of the drum, resembles a certain waving or Noise: but if some Insect creeping in, as a Flea or others, be carried to the Drum and touch that, whiles it moveth, there is heard a sound in the Ear making a Noise like the flying of a Butterfly, very troublesome: also if one drop of Water or more flow so far, 'tis perceived as if the head were hollow, and such a sound ariseth in it, as also these or other sounds are perceived if a Worm with many legs or some other thing, that doth not wholly stop up the Ear, but nevertheless is troublesom to be contained in it.

A Repletion of the outward Cavity of the Ear with internal humors is the cause of hurting the hearing.

If the Ear be filled up with internal humors the same comes to pass, that the Hearing is either taken away or impeded, or depraved; as if the Ear be obstructed with the cholerick filth of the Ears, which they call *Cerumen*, being long retained, grown thick and hard, especially if they be forced even to the Drum with an Ear-picker which somtimes happens by neglect, whiles they endeavor to take them forth, which afterwards sticking there, seeing they do not afterwards easily give way, they bring a great impediment to the Hearing; the which also may happen from blood congealed after a hurt of the Ear, and from matter after an Impostumation being some time retained, the which notwithstanding seeing they do not stick long, but flow forth of their own accord, they do not so much hurt the Hearing, as they prejudice the Ears upon another account as we shal shew in pains of the Ears.

A Tumor in the inner cavity of the Ear is the cause of the Hearing hurt.

The Hearing may be hurt by a Preternatural Tumor obstructing the Ears rather than by a distemper hurting them, and that lastingly if a piece of Flesh or Callus be left after some exulceration of the Ear, which is very rare.

A hurt of this outward passage unless it hurt the Drum (as shal be said) can scarce prejudice the hearing, unless it leave an excrescency behind it, as hath been said, and *Fernelius* writes that somtimes a Pulse doth remain in the Ears from an Ulcer not wel consolidated, the which because the Artery is no more well covered with the Skin, but bare, and for that reason doth more strongly beat upon the neighboring parts, must needs happen in the cutaneous Artery of this outer chamber, which is carried thither, as shal be explained in the Ulcers of the Ears.

A spirit, vapor, wind, in the inner chamber of the Ear are the cause of the sounding in the Ears.

The inward Cavity of the Ear distinguisht from that called the Outward, by intervention of the Drum, being ful of winding, containing small Bones, and a Nerve and Artery, being affected by a spirit, Vapor, Wind, or humor contained there, or if that and its parts be ill conformed or labour of a Distemper, they may also damnifie the Hearing; which faults because they are hidden we cannot attain to them by our senses, but know them only by their signs.

If the Artery which goes under this part be filled with a plentifull or hot spirit, or it be too much agitated in it, then a strong pulse being made in the Ears, there is a beating sound in the Ears, the which notwithstanding is more manifestly felt when the Ear is shut, as hath been said formerly, and if it be more vehement when it is open, it also depraves that sound which comes from without; the which as it comes to pass that the pulse is more intense by the vehement heat of the body in the rest of the Arteries, so here also in the Artery of the Ear; as it is felt after strong exercise sometimes in Baths; and also in acute Diseases, pains of the Head, this pulsation creates trouble in the Ears: the same also happens by motion and violent agitation of the spirits, as we see in a swooning beginning, the spirits flying away, and the same ending, those returning again, there is felt a pulse and tingling in the Ears, by which from the relation of the Patient, we know that swooning is at hand, the which also happens in many affections of the mind, by reason of the same commotion of the spirits.

A thin and subtil vapor, as it can enter the smallest passages, so doubtless it doth sometimes penetrate hither through the narrow holes (of which sort we have shewed in our Anatomical work that there are six that do end in this inner chamber of hearing and transmit their vessels) and so they may not only deprave the

Brain

Brain by affecting it, as hath been said formerly (as also we have shewed formerly that the sight is depraved by Vapors only assaulting the Brain, and not entring the Eye, seeing there is no way for them) but also by reason of the said holes, some of which end hither from the inward parts of the Skul, others meeting without the Skul do not reach hither also, seeing there are many waies, 'tis certain they may come even to the Organ of Hearing, which when it comes to pass, it must needs be that a Hissing, Tingling, and noise is offered to the Hearing: and this is more commonly the cause of preternatural Sound than an influx of humor, as shal be said by and by, seeing it is often wont to come to pass in Drunkards or others, and in many Diseases from Vapors sometimes thinner and cholerick as they call them, and sometimes thicker, that their Ears for that cause do tingle and make some other noise, which doth last long, the vapors persisting for a time, or they being presently dissipated, it doth vanish: And this is the chief cause why after a Crisis in acute Diseases which accompanied with a pain in the head amongst other symptomes, the Hearing in those that recover health doth suffer some hurt oftentimes of long continuance; the matter, which was then the conjunct cause of the Disease of being resolved out of the Veins into Vapors, and emptied by sweats and insensible transpirations, and part of it breaking out of the head through the aforesaid waies into the capacity of the Hearing and staying there awhile.

Wind or Air may cause the same, which if it break into this inner chamber of the Hearing and be carried through a narrow way, as it were by force, it makes a hissing: if through another hole so framed as it is wont to be fashioned in a pipe it causeth a tingling; but if it run through larger passages and through the windings of that place, it makes some other noise, this often happens, if it be driven thither by force, as when the Nostrils being prest, and the Spirit or the Air being vehemently impulsed, we would blow our Nose. Somtimes it comes to pass that part of it doth break through the hole from the largeness of the Nostrils, to the double channel of the Organ of Hearing (as we have shewed in our Anatomical work) and doth raise a Hissing or Tinglingt that oftentimes lasts long. Somtimes the Air breaking forth again the same way presently, it ceaseth, which comes to pass the sooner by swallowing often, as I my self have often experienced; this Wind also in the chamber of Hearing may be raised from an internal cause, if from excrementitious moistures collected about the *Periostia* of the Skul, and converted into Wind, they be heaped there, whence in ancient Headakes and Pains of the Head and about the Bones in the French Pox, a Tiggling of the Ears is very troublesome.

A humor in the inner chamber of hearing is the cause of the defect of hearing.

A humor falling down or purged from the Head into this inner Cavity of the Ear through the hole which admits the Auditory Nerve; as if it be plentiful it causeth Deafness or thick hearing, so if it be subtile and little it depraves the Hearing; and if this happen from a desluxion of it, it comes suddenly if it be heaped up there by degrees, this hurt also grows by degrees, all which for the most part do beget a Disease of long continuance and persevering, seeing the humor is hardly discust here; but this proceeds from a Catarrh which falls down also to other parts, and somtimes from the head to this part; and it is known by the signs of that, not only in that hurt, but also by other appearances; the which is familiar to the aged, by reason of their plenty of excrements and accustomary to some natures from their Infancy that it molest the Organ of Hearing, as it may come to pass by reason of the Country, as in the *Alpine Regions* we see that many for this reason have difficult hearing from their Birth, or presently in process of their age, together with the *Kings-evil* familiar with them for the like cause: and also in acute Diseases by a Crisis chiefly, as hath been said formerly, not only the cause of the Disease converted into a Vapor doth enter this chamber, but also oftentimes part of the excrementitious or cholerick humor doth fall into it, somtimes pure, somtimes mixt with Blood stil as some would have it, and breeds a more pertinacious hurt, than if it were caused by a Vapor.

The fault of conformation in the inner chamber of Hearing and its parts is the cause of the defect of Hearing.

Default of the Confomation and structure of the Organ of Hearing is also hurt which seeing in this inner chamber 'tis made up of the auditory nerve, the Drum and three Bones, and Labyrinths of this chamber, in which soever that happens, it may hurt the hearing.

By reason of the Auditory Nerve not rightly formed, or carried from the Birth, it somtimes falls out that they are born deaf; and we know that it happens by reason of the Nerve, because most of them are also dumb, seeing the Tongue which wanted many Nerves for the sense of Tasting, Touching, and the exercise of vehement motion, hath obtained not only its proper Nerves, but also hath received another from the auditory Nerve, for that cause breaking forth of the chamber of hearing, by whose means the Tongue is continuous with that, the which being hurt, it comes to pass that the Tongue, although the senses remain, yet is not sufficiently moved to utter speech, seeing a greater force is required for motion, than to perfect the sense; neither doth it hinder, that that is only a sensory Nerve of which the Tongue is here deprived, seeing we have often proved already, that every Nerve hath in it a power of moving and Feeling, the which it doth also exercise, being carried to a convenient Instrument.

By reason of the Drum the Hearing is more commonly weakned, if as we see in a Souldiers Drum covered with skin, if it be not whole, or not sufficiently retcht, or too much.

The Drum wounded, seeing it can no more resound, breeds Deafness, the which seeing it lies hid, it seldom comes to pass, unless an Ear-picker be thrust in perforce; the vulgar think it may happen from the Insect *Scolopendra* (which they cal in the German language *Orenmettel*, as it were the Worm of the Ear, which may easily creep in in Gardens) but seeing if either that, or any thing else which may hurt should creep in, it is easily remedied, this can scarce yet be done; as neither from matter retained, seeing that is wont presently to flow forth, and I have often seen very much flow forth without any hurt, unless by chance the Ulcer of the Ears be so deep that an absceſs being made, the Drum also is hurt.

If the Drum be slackly and conveniently retcht, it can no more give a Sound, which as it somtimes happens by force from a violent sound, a Clamor made in the Ears, or from the blow of a Gun shot off by the Ear, so also by continuance of time, long use and much hearing, especially of great sounds, being so often beaten upon, and rendred slacker it makes difficult hearing in old folks (which seems to be the frequent cause of their thick hearing) The which also may happen from much moisture or Unctuosity if Oyl or other Liquors

be often poured into the Ears, the which is wont to be done, somtimes for a long while, to restore the Hearing lost for some other Cause.

Also being too much retcht, and so tied up that being beaten upon by the external Aire it cannot yeild at all, it becomes unprofitable. And this happens, when either by reason of Age, or after acute Diseases it is too much dryed and harden'd. The which as it may befal all other Membranes, so this also, and by so much the easier and more frequently; becaus it hath no moist Bodies neer it, nor is not anointed with fat, as many other Membranes are, but is free, unless in its compass where it grows to them. And perhaps this is not the least cause, of difficult Hearing, which oftentimes is wont to grow upon the aged, and is left in people recovering after Diseases. Which Exiccation of the Drum, *Rhazes* writes may happen after watchings and fastings.

The mutual Construction and Coarticulation or Conformation of the three smal Bones being Vitiated, brings hurt to the Hearing: which may happen from the Birth, from implanted Causes; or from violent Adventitious Causes, as a blow, fall, and vehement sound, the Drum to which they adhere, being most commonly affected too.

In the divers Passages, Cavities, and Meanders meeting there, if any thing be not right from the Birth, doubtless it also offendeth the Hearing.

A cold Distemper is the Cause of the defect of Hearing.

A cold Destemper, as it is an enemy to the Nerves, Membranes, and Bones, so it is very hurtful to the structure of the Organ of Hearing, which is composed of them, and so much the more, becaus the Eares alwaies lye naked and open to the external cold Aire, and so are the easier hurt by external things, as the cold winde; especially penetrating through the Auditory passage, even to the Drum, and there cooling the hidden parts, and the Nerve it self. Whence somtimes Deafness, and frequently an impediment in the Hearing, have followed; the which also is one of the principal causes, why in cold places, as the Alps, and windy places, they commonly are sooner sensible of a defect of Hearing, the which also may happen from most cold water falling into the Eares by chance, or in swimming.

The use of Narcoticks, the cause of the defect of Hearing.

And the too much use of Narcoticks, somtimes to the Eares doth so affect the Nerve not by cooling, but by too much stupefying it, that it can no more return to it self; which last cause is to be refer'd to weakness.

The Cure.

The Cure of all the hurts of Hearing, which are, as Deafness, thick Hearing, Tingling, Hissing, Pulsation, Fluctuation, Noise; is first to be fitted to the Cause. Which we have said, was either in the Brain affected, either by it self or by consent from a Vapor, or the object, or in the outward Cavity of the Eare, a Stoppage, obstructions from external Causes, or things fallen in, or internal Humors, Tumors; or in the inner Chamber of the Hearing repletion or trouble from a Spirit, Vapor, Winde, Humor; or a fault of Conformation, or Construction, or a Distemper; of all which we shall speak, what is to be hoped and what to be done.

By reason of an affect of the Brain, if the Hearing be hurt together with other senses, and the cause lye there and not yet in the Instrument, we must proceed after the same manner, as hath been said in the hurts of the sight from the like cause: as if this come to pass from a Vapor affecting the Brain by consent, no other Remedies must be applied then those in a Vertigo which we said were convenient in a Depravation of the sight.

The Cure of the hurt of Hearing from a violent sound.

If the Hearing suffer a defect from some Impetuous external sound, somtimes they return to themselves of their own accord, otherwise hardly or never, *viz.* when the Spirits are so dissipated, that they can no more return back, or not sufficiently. Whence there is left a Perpectual tingling. Or if the drum impulsed by the force of the Aire, be too much hurt and laxt, a Deafness or thick Hearing, is ever after troublesome to the man.

Yet nevertheless by applying Cupping-glasses about the Ears, and by Frictions and other hot things outwardly and inwardly appropriate to the Ears; we must endeavor to draw back the spirit, having respect to the constitution of the Body, of which we will treat by and by.

The Cure of the defect of Hearing, from the stoppage of the Eares.

If the Hearing be intercepted by the stopping of the Ears extrinsecally, it is easily corrected by removing those things which hinder it, whether they be only applied exttinsecally, or they be thrust in a little way.

The Cure for things fallen into the Ears.

But Bodies fallen in, or thrust in, that do wholly enter into the Cavity; or if living creatures have crept in, they do not so easily yeild, therefore there is need of greater art to take them away, either by washing them out, or shaking them out, or drawing them out, or enticeing them out, or killing them.

Somtimes they give way by washing, if they stick not very fast. Which is done by pouring in those things which make this way slippery, and moisten and dilate it, as the common Oyl of sweet Almonds, Butter, Milk; or some relaxing and smoothing Decoction.

We shake them out by a certain violence, causing Sneezing. For so those parts being shaken with the impulse of Spirit, that which is fallen in, oftimes leaps forth, or at least is forced forward, which will the sooner be done, if the way be first dilated, as hath been said, by Dancing and beating the Foot of that side, as the Eare affected is, against the ground, in the interim holding the Head with the Hands, and bending it towards that part. Things are also shaked out of the Ears; which way Water and other Liquid things that are flown into the Ears are commodiously cast forth, as Boyes are wont to shake it out after bathing in the River, if any thing hath flowed into their Ears,

If these succeed not we draw it out with an Instrument fit for for this purpose. Yet we must Studiously take Care, that whiles we put it in, that which sticks be not forced in farther, whence afterwards it is taken forth with greater difficulty. This is done with an Ear-picker, with which the filth is wont to be taken out, whose hollow part must be very thin, that being there put behinde the things contained, they may the more commodiously be drawn forth. Or they must be laid hold on and puld out with a pair of Tongs fitted for that purpose, sharp on both sides and rough, or if this succed not neither, laying hold of them with another Instrument, if they be hard Bodies, as a Kernel or Stone, we break them, and then as hath been said, with liquor poured in, we wash them forth.

Somtimes

Somtimes we Allure living Creatures, with certain things which are pleasing to them, that they may creep outward, and so then they may be laid hold on; as if we apply Milk with Sugar in a Spunge to the Eare, or thrust it in gently, or the inside of a Fig, or a crust of Bread, or an Apple, or the like, or Bacon Grease, with which Worms are sooner enticed, and that especially, if whiles they hold these things in their Ears, they turn them up to the Sun. By pouring Blood into the Ears, Leeches that are got in by chance are drawn forth.

We kill living Creatures, if they stick in the Ears, and give no way, and then being dead they do no more outnoise the Hearing, and they are the easier washt out, or shaked out; and that is done by choaking of them, if Liquors be poured in, so they are wont, taking on their Finger spittle, which is ready at hand in the night, to drop it into the Ears, if Fleas have crept into them, which by its Tenaciousness doth presently stop up their Pores, the same is done by pouring in their own water. If those things poured in be bitter, they sooner kill insects, as the Juyce, or the Decoction, or the Wine of Centory, Wormwood, the juyce of Rue, also killeth insects; Also Gauls and Aloes, Acrid things do the same; Vinegar, the juyce of an Apple, and of Onions; And the rest which shall be explained in the Woms of the Ears.

The Cure of the Hearing, from a Repletion of the Eares.

If the Ears be stopt by filth or choler, clotted blood, Matter, they must be extracted with an Ear-picker, or by some other Art, as hath been said. And if they be so thick, or Tenacious that they do not easily give way, then they must be clensed, dissolved, and washt out, by casting in liquors often, and flowing forth again, such as in clensing of matter shall be expresst in the Ulcers of the Ears. And Honey and Water, or Hydromel is chiefly good; or if we must clense more powerfully, that must be done with the Decoction, or bitter juyce a fore mention'd, of Wormwood, Centaury, Lupines, adding Honey or Gall which above all other things, as hath been often said, doth make fluid those things which are viscous, and hath great strength in dissolving Eare Wax, into which it doth egregiously insinuate it self, by reason of a similitude of Nature with it.

If a fleshy Tumor stop up the Ears, it is scarce taken away, seeing it cannot be cut, and Causticks or Septicks are put in with danger to the Drum, the Callus left is hardly mollefied, Yet Emollient remedies may be tryed.

If a Pulsation be left in the Ears after an Ulcer. *Fernelius* writes that it is perpetual, which Impediment nevertheless, is diminisht or ceaseth, perhaps the Skin being drawn over the Wound, and in space of time growing thicker.

The Cure of a Pulsation in the Eares, by reason of the Arteries.

If a sound be felt in the Ears by reason of the more vehement Pulsation of the Arteries in the Ears, that remitting, as it is not wont to be of long continuance that sound also ceases; if that come to pass from too exquisite a sence, then it feels it either alwaies, or from a light intension of the Pulse, and in proceess of age, the senses remitting, it is mitigated, or it is corrected by putting in Narcoticks if it be very troublesome, as if the juyce of Henbane be dropt in with Oyl or Vinegar.

The Cure of the hurt of Hearing, from the repletion of the inner Cavity of hearing.

If the Hearing be hurt by a Humor, or Winde, or also a Vapor contained in the Cavity of hearing; then if the matter be very thin and Vaporous, tis at length dissipated of its own accord. Or if it be thicker and stick there, it often produceth an evil of long continuance.

In the Cure of which, whether Deafness, or thick Hearing, or mishearing be caused from thence; Emptiers are chiefly used after the same manner, as they are described in a Vertigo, and weakness of the sight, caused by watrish Serous, and flegmatick Humor, and the altering means, which are described in the *Oxydorcical*, or Eye-clearers are convenient for them also. And Topick remedies must be applied too, and into the Eares, which may waste, Dissipate, and Discuss the matter contained there, and which by a propriety do restore the Hearing, all which shall be Methodically appointed in the following order.

The filth of the Guts must first of all be washt out, by Suppositories, or Glysters, or giving a Minorative purge; as hath been said in the places foremention'd, and shall be said in the Excrementitious Diseases of the Brain.

Bleeding if there be a Plenitude, or if Cholerick matter together with blood flowing to the Ears, hath caused Deafness in the crises of Diseases, will be convenient as hath been said.

The Humors are prepared, if Flegm abound in the Brain, after the same manner: or thus, giving the things following for some mornings, and at night when he is going to bed, if there be need of great preparation; as, Take *of the syrups of Betony, French Lavender, of each half an ounce; Oxymel of Squils two drams, the waters of Sage, Rosemary, Marjoram, of each one ounce*: Make a Julep for once, Aromatize it; or let him take Lozenges after, it must be repeated as hath been said.

Or let this Decoction be prepared, which is more effectual: Take *of the roots of the true Acorus, Orrice, of each half an ounce; Elecampane two drams, Liquorish one ounce, the Herbs Sage, Rosemary, Marjoram, of each one handful; Time, Rue, Bahn, of each half a handful; flowers of Betony, Lavender, French Lavender, of each one pugil; Fennel seeds two drams, seeds of Caraway, Rue, of each one dram; Bay-berries, two drams*: Make a Decoction, and and in *one pound and an half* of that strained, Dissolve *of the best Honey eight ounces*: Boyl them to half the consistence of a Syrup, and hang in it a rag tied up with *Cinnamon two drams, Cubebs, Spicknard, of each two scruples; long Pepper, Ginger, of each one scruple*: Let him take four ounces at a time.

An infusion made in Wine of the same things, and Plants and Spices may be used; adding, if he be delighted with bitter things, Wormwood, Ground-pine, and Hore-hound, that it may be drank like wormwood Wine.

If a Cholerick humor abound in the Body, that is rather to be prepared, as it ought.

Then let him be purged after the same manner as hath been said in the hurt of the sight from Flegm of the Brain, chiefly with *Cochiæ pills, sine Quibus, Lucis*, or with Electuaries, as *Indum* or others, or if the matter be Cholerick, with things appropriate to Purge that Humor.

And taking by course gentler Pills, and somtimes stronger, or in other forms, as these things have been explained in the Remedies.

Sweats are very convenient here, because they call forth the thinner Excrements from all parts, even those that are hid, and do discuss Wind and Vapors; wherefore they are to be procured, the Body being first purged, by the heat of a dry Bath, or moist, Artificial, or Natural, amongst which it is vulgarly beleeved, that Baths do good to the Hearing, and some chiefly commend the Suphur Baths, and think them so effectual in curing of Deafness, that if the Patient while he sets

in the Bath, receive the hot water flowing through the Conduit cock, in a large ſpunge which doth compaſs the whol Head, and that twice a day, it is the moſt excellent Remedy for it, and alſo they may be ſomtimes moved, by giving of Sweaters and applying if need be, the ſaid Diet in ful bodies, which in Deafneſs is oftentimes the laſt Remedy, *viz.* by making a Diet as they are wont to cal it.

The Excrements of the brain muſt be called forth by the Noſtrils and mouth, and enticed thither, whence oftentimes there is great Revulſion from the Ears, and ſomtimes ſome purgation: for by Maſticatories, whiles the excrements of the Brain are drawn forth, they are not only revel'd, that they flow not ſo to the Ears, but alſo by frequent ſpitting, an expurgation by this impulſe, both of humors and wind being ſomtimes made through the ſaid holes that in the baſis of the Skul do enter the Organ of Hearing, it frees this part from Obſtruction; as experience ſhews, that by ſtrong ſwallowing often repeated ſometimes the Vapors and Air which hath broke into the Cavity of Hearing when the Noſe was blowed with violence, there cauſing a Sound, is as it were drawn forth again, the ſame way it entred, and as it was ſuddenly cauſed, ſo that ſound of the Ears doth ſuddenly ceaſe; wherefore ſwallowing alſo, in the interim preſſing the Eears outwardly, is a Remedy for bringing forn of the Wind, not to be deſpiſed.

Errhines alſo may do the ſame, and a ſtrong excuſſion of the Air by blowing of the Noſe, where nevertheleſs, if the Noſe whiles it is blowed, be ſo preſt, that the Air cannot conveniently go forth, but oftentimes recurring breaks into the chamber of the Ears through the ſaid holes as hath been ſhewed, and ſo depraves the hearing; for which cauſe it muſt be ſo blowed, whether with the hands or with a handkerchief, that there may be free paſſage for the Air through the Noſtrils.

Sneezing doth this far more vehemently which often ſhakes forth of the Ears Wind or Humor ſpeedily by the ſame way; but being ſo cauſed, that the force of the Air be not ſtopt, with the ſame caution as we declared even now in blowing of the Noſe.

Scarification made in the Wriſt is beleeved to derive much from the Ears: but it wil do more good, if it be done in the Neck about the Jugular Veins, whence they have preſent eaſe. Cupping-glaſſes alſo applied to theſe places, or to the ſhoulders are profitable. And laſt of all a Cauſtick.

The Remedies formerly mentioned are applied to the Head, whether outwardly adminiſtred or received by the Noſtrils in a ſuffumigation, amongſt which Remedies that are various, this is a ſingular help, which is done by Embrocation of Sulphureous water, as hath been ſaid formerly.

The ſame Remedies taken inwardly which have been explained in the ſaid places, and ſtrengthen the Head, Alter, waſt, and diſcuſs humors, Wind, Vapors, are convenient here alſo both in a decent courſe of diet, in which old ſtrong Wine is commended by *Rhazes*, and in other Medicines and Confections, to be taken faſtingand after meat.

Topick Remedies for the hearing.

The Remedies which are put into the Ears in the ſaid cauſes, called *Acoſtica*, are various; the more ſelect and corrected forms of which, we wil here explain.

Simple *Aqua vitæ* ſo called is good.

A more appropriate one made thus. Take *of the water of Organy ſtilled from the dry herb ſteeped in white Wine*, let him uſe it.

A more Compound Water. Take *of the roots of Radiſh, Leeks, Onions, each one ounce; Sowbread half an ounce, white Hellebore one dram, the dried herbs of Organy, three drams, Rue, Marjoram, each two drams; Lavender flowers one dram, Fennel, Cummin ſeeds, each one dram; Bayberries fifteen*, bruiſe them all, and add of *a Cows gaul one dram, White Wine* as much as is ſufficient, that they may be reduced as it were into *a Pultiſe*, and diſtil them.

Another eaſie to be prepared, uſed a long time with no final ſucceſs. Take *of an Ox gaul two pound, freſh Onions ſliced, freſh Radiſh ſliced, each four ounces; freſh Caſtor ſliced one dram*, let them ſtand all night, then diſtil them, let *that Water* be kept for uſe.

A Decoction may be made thus. Take *of the roots of white Hellebore, Sowbread, each one dram; the herb Organy two drams, Cummin ſeeds one dram*, boyl them in *white Wine*, ſtrein them for your uſe: if you take *Vinegar of Squils*, it wil be more effectual.

Another Decoction yet more excellent and very much commended. Take *of the roots of White Hellebore half a dram, Saffron, Caſtor, Niter, each one ſcruple*; braiſe them together, let them boyl in *Vinegar half an ounce, Aqua vitæ two ounces*, ſtrein them for your uſe.

Many Juyces are uſed, as of Onions, Leeks, Radiſh, Rue, alſo the Tears of Aſh and Vines when they are pruned, eſpecially in a hot cauſe.

Oyls are often uſed for the Ears otherwiſe then for the Eyes, the more common are Oyl of Bitter Almonds and Spike.

Oyls drawn by diſtillation are moſt effectual above all other Remedies, extracted from hot odorous Plants and Seeds chiefly, as of Roſemary, Marjoram, Sage, Rue, of the Seed of Cummin, Carawaies, Fennel, and Bay berries, and what is every where to be had, Oyl of Spike, or Oyls of Spices, chiefly of Cloves, all which are ſcarce given alone, by reaſon of their too great vehemency, but diſſolved in ſome Liquor, or mixt with other things, they are moſt happily dropt in, as ſhal be ſaid.

Compound Oyls are thus made, amongſt which this is excellent. Take *Oyl of Bitter Almonds half an ounce, the juyce of Organy purified one ounce, White Wine Vinegar two drams*, let them boyl til they are waſted fit for uſe.

Or thus, Take *Oyl of Bitter Almonds, Spike each half an ounce, the juyces of Leeks, Radiſh, Vinegar, each two drams*; boyl them to the conſumption of *the juyces*, and let him uſe it, if you add *Caſtor one ſcruple, Euphorbium half a ſcruple*, it wil be more effectual.

Or many things added it wil be moſt effectual after this manner. Take *Oyl of Spike, Bitter Almonds, each one ounce & an half; the juyces of Radiſh, Leeks, Onions, and Rue, Vinegar, each half an ounce; Aqua vitæ two drams, add of the pouders of the roots of white Hellebore, Sowbread, each one dram; the pulp of Coloquintida one ſcruple, the Leaves of Organy Cummin ſeeds, each one dram; Long Pepper half a dram, Caſtor one dram, Euphorbium one ſcruple, Niter two ſcruples*, boyl them to a fit conſumption for your uſe.

Or make a hole in a great Onion or a Squil, or great Radiſh, and fil it it with one or more of the aforeſaid Oyls, adding alſo other things and boyl it under the Aſhes and uſe it; the which done in an Apple of Coloquintida, wil be more powerful.

Mixtures are made of the aforementioned, ſuch as this is very proper. Take *of Aqua vitæ two drams*, in which diſſolve *Camphire two grains, Oyl of Spike one or two grains, or ſo many drops of other Chymical Oyls*, and if it be too ſtrong, dilute it a little with Water of Organy.

Another mixture of Oyls and Juyces,. Take *of the mixture of the Oyls of Spike and Organy made after the ſame manner each half a dram; Oyl of Lavender two grains, a lit-*

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tle of the white of an Egg, beat them very wel, that they may be all mixt, and it become like *Milk*, and when you would use them beat them again.

Or thus, that it may be made like an Oyntment. Take *of Oyl of Castor, Goose-fat, each one dram; Cows gaul half a dram, Castor half a scruple, Rozin of the Larix tree a little*, mix them, anoynt *a Tent* and put it in, some drops of Chymical Oyls may also be mixed with it, as of *Cloves* or *Cummin-seed*, and it will be more effectual.

Trochisks to be kept for use may be made thus. Take *of the roots of Hellebore one dram, Sowsbread half a dram, the pulp of Coloquintida one scruple, Saffron a dram and an half, Niter two scruples, Labdanum one scruple, Euphorbium half a scruple, Musk six grains*, pouder them and make them up of the juyce of a Leek, dry them; let one of them be dissolved for your use in Vinegar or some juyce, of a Leek or a Radish.

Suffumigations admitted into the Ears before the use of these, and afterwards also, do very much good, and penetrate to the innermost parts.

Such as this may be. Take *of the roots of Hellebore one dram, the Plants Laurel, Marjoram, wild Time, Penny-royal, Calamint, Rue, Balm, Hyssop, Southernwood, each half a handful; Organy one handful, flowers of Lavender, Rosemary, each one pugil*; Juniper *and* Bay *berries, each half an ounce*; *seeds of Cummin, Carawaies, Fennel, each two drams*; bruise them and add pulp *of Coloquintida half a dram, Niter one dram*, make a Decoction in *Wine and Vinegar*, let him receive the Vapor or Fume, caused by quenching Stones in the Decoction, into his Ears by a Syringe.

Or which is more effectual. Take *Oyl of Nuts two ounces, Vinegar one ounce, Aqua vitæ half an ounce, Sulphur one dram*, boyl them and while it boyls, let him receive the Smoak.

The Ear also may be fomented with the forementioned Decoction described for a Suffumigation, or a Spunge dipt in it, may be applyed to the Ears whiles it is hot.

Bread made of Bran or Flour, and wrought with Caraway seed before it is baked, then after a little baking, being broken in two and applied to the Ear affected, whiles it is hot, doth help wonderfully in sounds of the Ears.

A Bag of the same things applied to the Ears for the same uses, and a pillow in the night is laid under the Ear affected, and such things may be sowed into a Cap in that part where it touches the Ear.

Which may be done thus. Take *of the roots of Sowsbread, Orrice, Asarabacca, each two drams*; *the herbs Calamint, Basil, Pennyroyal, each one dram*; *Organy two drams, French Lavender, Rosemary each one dram*; *Caraway seeds two drams, Grummel seed a little bruised three drams, Spikenard half a dram, Lignum Aloes one scruple, Storax two drams, Salt three drams*, mix them, fil a *Bag* or *Pillow*.

A Board of Cypress or Juniper, heated and applied doth good, especially if first of all it be strewed with pouder of Organy, and it is a secret Remedy for many things.

The Cure of the hurt of hearing from the fault of conformation.

If the hurt of hearing hath proceeded from the fault of conformation from the Birth, whether it be in the Nerve whence for the most part they are born Deaf and Dumb, or in the Drum or small bone placed there, or in the Cavities and Maeanders there variously carried, being ill formed or built, then all Cure being in vain, though divers acouistical Remedies be tried.

An eminent hurt of the Drum from an external cause, as a Wound, is incurable, and if by reason of the same cause it be too slack or retcht, 'tis hardly reduced to its natural state; yet when it is too much laxed, those Remedies which restore the hearing are convenient also, but when it is retcht by reason of old age or after a Disease then things laxative; upon which account, as we do otherwise command a Restorative and Moistening course of Diet in old folks and those recovering, so even upon this account it is profitable, and we infuse warm into the Ears things lenitive and moistening such as are warm Milk, especially a Womans, and temperate Oyls, of sweet Almonds, Butter and the like.

The Cure of defect of Hearing from a cold Distemper.

If there be a weakness of the Hearing from a cold distemper extrinsecially, the Air or Water bringing hurt to the Ears, the Remedies which we said were convenient in a cold internal cause, here also either laid on the Ears, or let in by Suffumigation, wil do good.

The Cure from the cause of Narcoticks.

The which also wil take places, if this happen from the use of Narcoticks put into the Ears, making choice chiefly of those which have Vinegar in them, which we have often said doth above other things infringe the force of Narcoticks.

CHAP. IX.

Of the hurt of Smelling.

The Kinds,

The defect of Smelling.

THe Smelling is wholly abolisht, when it perceives no Scent at all not only of things distant, but of those applied to the Nose and taken inwardly.

But it is impaired only seeing the Smelling perceiveth not things unless very neer to the Nose, and those which breath forth a strong smel, whether also may be referd that case, when they smel not things unless they be thrust into their mouth, which one writes hath sometimes happened, when notwithstanding otherwise the Scent of things put into the mouth, is in no wise naturally perceived this way.

A Depravation of the Smelling.

The Smelling is depraved seeing it judgeth the Scents of things not such as indeed they are, but falsly, to be otherwise Scented, as when it perceives those things which are otherwise indued with a grateful smel to send forth an ingrateful Scent, or when it thinks those that smel wel, do stink, which for the most part happens the Taste being depraved too, seeing the Judgment of things taken inwardly, doth partly belong to the Smelling, or when Nourishments of themselves grateful both in Sent and Taste, are often judged in Diseases, to Savour and Smell ingratefully, but either we do in no wise refer those things which are truely stinking, though they offend the Smell, as neither do we refer Grief to the depraved Touch, seeing it doth rightly perceive that which indeed is so.

The Causes.

Defect of Smelling by fault of the Brain.

In the part sending, *viz.* the Brain the same which the Senses of Tasting and Feeling, may be the cause of this hurt,

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as hath been explained there, the which also is known by this, because these senses are hurt too.

If the cause of the hurt of Smelling consist in the part receiving the sent; because it consists of many that is either out of the Skul in the Cavity of the Nose, together with the prominency and patency of the Nose, or tis profound and hidden, or within the the Skul, in the holes of smelling and its Organ.

A stoppage of the Nostrils, is the Cause of the defect of smelling.

Unless the two prominent Chanels, which they call the Nostrils, Extrinsecally drawing in the sent, by pressing on both side the Pins of the Nostrils, or by applying other things be stopt, and for a while do take away the sense of smelling, which how it comes to pass by chance: because the hurt, which then it brings to breathing is greater then that which takes away the smelling, it shall be explained there, and when this is done on purpose and voluntarily; and that, that we may not smel external stinks: Because it is then no waies counted a fault, we need explain it: As also if against our will they be stuft with Snivel, or Tumor, unless this be at once in both Nostrils, and they be wholly stopt, whence the smelling would be hindred, (the which yet can scarce be done, that so great quantity of Snivel should long stick there, and a *Polypus* is wont to possess one Nostril only) becaus that doth rather prejudice the drawing in of the breath the smelling this cause also must be refered thither.

An obstruction of the deeper Cavity of the Nostrils, is the Cause of the defect of smelling.

In the profound largeness of the Nostrils, not that which is carried transversly from the Nostrils to the palate (because through that only the scent, which we meet with outwardly doth no way ascend, but that also which breaths from those things, which are put into the Mouth, as hath been said, is kept off by reason of this transverse Scituation, and is not perceived, unless some other cause be joyned) but that which is next to the Skul, the five like Bone, and the spung Bones of the Nose. If there be so great a Repletion, or such an obstruction, about the holes of the said fivelike Bone, which may hinder the sent of things that it cannot Penetrate, a defect of smelling oftimes happens.

Which oftentimes happens from thick Flegm distilling thither from the Brain, and being long retained, and somtimes becomming mucous, and highly viscid, and upon that account the smelling is hindred, and when putrifying it begins to stink, or strainge matter endued with a strong sent is mixt with it, it is depraved, till that matter being cast off, which is done by vehement blowing of the Nose, or by Sneezing, they are freed from that Disease.

That this hath somtimes happen'd from a *Gypseous* and *Tophaceous* matter, or from a Stone bred in those narrow passages, the voiding of these things hath at last made manifest.

And what is rare, that a Worm bred there and a long time retained, and after many years voided all hairy, from a Woman of *Berna*, hath given occasion of this fault, the Physitian of that place hath signified to me, and sent me the draught of that Worm.

They teach also that it may be done by matter retained, but unless somwhat else be joyned, as a Callus from an Ulcer, or an Excrescency, matter cannot be so long retained, nor in no wise grow so thick.

And also this defect somtimes betides those whose bones of the Nose are fallen down in that place, either by a Disease the bones being eaten, as in the Elephantiacal, or those troubled with an *Ozena*, or by a fall, or blow made upon that part, and the bones being broken which also happens to some from their Birth, that their Nose being depreft about the root, they do not smel well.

A stoppage of the holes of the Organ of smelling, is the cause of the defect of smelling.

The smal holes of smelling in part of the thick Membrane of the Brain, which is spred over the fivelike Bone perforated in like manner, if they be filled with any Humor, because nothing ought to be carried through them naturally, but the sent, do cause a defect in the Smelling.

As it comes to pass, when a thin Rheum, or the serous Excrements of the Brain falling down to this higher part within the Skul, and passing through the narrow holes, and distilling from the Nostrils do produce the said *Coryza*. Then some portion of this matter remaining in the said holes, and obstructing them, it brings a defect of smelling, which is wont to accompany, or follow a *Coryza*, the which also may happen from other matter heaped there.

And also it happens by fault of conformation from the Birth, that these holes being absent, both in the Membrane and the bone, and omitted by the defect of Nature, or being but blind ones, this becomes an original fault with man, that he smels nothing, as on the contrary it is credible, those who have these holes larger, as they seem to to be in Dogs which are quick of sent, that they smel more acutely, and truely.

A Repletion of the Organ of smelling with Flegm, is the Cause of the defect of smelling.

That also may happen by default of the Organ of Smelling or Nerve, if it be too much moisten'd, as hath been already said, by a thin Humor flowing down to these holes, on on which the Organ of Smelling lies; or be prest with an afflux of, of another Humor, as hath been said of the rest of the Sensory Organs, or Nerves, which also may befal them from the Birth, by the fault of Conformation, if either they be wanting, or if they offend in Scituation and Figure.

The Cure.

The Cure of the defect of Smelling by fault of the Brain.

The Cure must be prepared according to the Diversity of the place, chiefly where the Disease, or its cause lies, which we have taught doth consist in the Brain, or the Cavities of the Nose, or in the holes of Smelling, or in the Instrument.

If it be by reason of the Brain, then we must oppose it here, as hath been explained in the rest of the senses, in like manner hurt together with the Smelling.

The Cure of the defect of Smelling, from obstruction of the Nostrils.

If the Patent, or hidden Cavity of the Nostrils be stopt, or obstructed with Snivel, or thick Viscous Flegm, then we must try by purging it, if it can be so removed, or by blowing it to take it away by degrees. And we must endeavor to shake it off by Sneezing, chiefly by irritating the expulsive faculty, if it be already prepared for excretion.

Putting into the Nostrils, if they yeild not easily, or lie deep, those things which may mollefie them if they be hard, or attenuate them if they be thick, or clense them if they stick Pertinatiously, and may stimulate also the expulsive faculty, whence they may afterwards

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more eaſily, as hath been ſaid, either be taken out, or blowed out, or forced out by Sneezing, which we ſhall moſt commodiouſly do, by drawing up of Errhines or pouring them into the Noſtrils.

Emollient Errines and abſterſive are made of Whey, Hydromel, and the like.

Inciſive and clenſing are made of Wine, Vinegar, a Lie, and ſuch like.

Abſterſive and Stimulating, are made of Niterous Herbs, and acrid things, and others, amongſt which Gaul doth chiefly diſſipate things viſcous, ſeveral forms of all which are every where expreſt.

By receiving in at the Noſtrils the Vapors of ſome hot Decoction that doth cut and prepare Flegm; we prepare it for an eaſier expulſion. Such as we have formerly taught, were admitted into the Ears in the defect of Hearing, are here alſo convenient, and their like.

That matter is in ſome ſort attenuated, and ſtirred up to excretion, only by the ſmel of Acrid things; as of Muſtard, Radiſh, and if we adviſe them often to ſmel to thoſe things endued with a ſtrong ſent; either grateful, as Musk, Amber, or ſtinking as Caſtor, *Aſſa-fœtida*; we ſhall not only devide and provoke Flegm, but alſo we ſhall ſtir up, and recal into act again the the faculty of Smelling, which was laid a ſleep by the intermiſſion of Smelling.

And if ſome other Tophaceous Body, or Stony, or living Creature, as hath been ſaid of a Worm lurke in thoſe Caveties, which is very rare, then becauſe we can ſcarce gueſs at it, we can ſcarce apply remedies for it; and if they be there, and can give place, by the ſame means, as we have ſaid a thick Humor was provoked, theſe alſo are ſomtimes caſt forth by Sneezing with admiration.

But we may gueſs that a Worm is there, by this: Becauſe there hath been one caſt forth before, and now the ſame Symptoms appear again, which were then before it came forth; and we muſt mix bitter things, Gauls, the juyces of Wormwood, and Aloes, with the Errhines and Vinegar alſo, that we may kill it.

The Cure of the defect of Smelling, from flegm in the Organ of Hearing.

If the holes and Organ of Smelling being molleſted with thin flegm, do produce a *Coryza* with defect of Semlling, the Cure ſhall be explained in that Symptom which is moſt grievous, *viz.* how the body is to be purged, and reſpect is to be had to the Head, and thoſe Fluxes are to be ſtopt, or to be derived another way.

The Cure of the defect of Smelling, from the fault of Conformation.

But if the evil be organical from the birth, then it can no waies be mended, and it muſt be wholly committed to nature, which ſomtimes of it ſelf in its great changes doth ſomwhat, as alſo if it be by reaſon of the Noſe depreſt from the Birth, or from Diſeaſes or a blow, this Figure being vitiated, can never be corrected.

The End of the firſt Book.

THE SECOND BOOK OF THE Hurts of Functions.

HANDLING the HURTS of MOTION.

THe Motions whose Operations are discovered by our senses (for we do not treat only of those Functions) are some of them voluntary which are done, or regulated by our will, others involuntary which are perfected of their own accord by strength of Nature, not by our Will.

All voluntary Motions fall under the senses, some of which are performed while a part is moved from a place into a place, the which do depend soly on our wil, which we call simply Voluntary, others are made by drawing in, and sending forth the Air, and that partly by a Voluntary, partly by an involuntary Motion, and it is called the Motion of Breathing; but others are perfected by taking to them some matter, but chiefly by voiding it, and some both waies, which we cal Motions of Excretions, from whence there will arise three chief kinds of the hurts of Motions, of the Voluntary, of Breathings, and Excretions. Which hurts of them sometimes come to pass by accident, and that either by reason of that hurt of the internal senses, by which these motions are also offended, of which we have already spoke in the hurts of the internal senses, or by reason of a Cessation of the vital Motion, whence it must needs be that these do rest, or are weakend when they are impaired, the which we will handle in the defect of vital Motion; but otherwise these Motions are hurt not by reason of the said hurts, but by themselves, as now we shall shew in these three kinds.

The Motions called simply Voluntary, are of the external Members of the Body, and those either most stronge in those parts, which being strengthned with Bones, are most able to endure them, such as are, to bend or raise up the Body, and with that the Head, by benefit of the Back, to lay hold on and handle things with the Arms, Hands and Fingers, to stand or go with the Thighs and Legs, with the mandible (which alone of all the Bones in the Head is firm to exercise most stronge Motions) firmly to take things and devide them with the Teeth; the Motions weaker then these are, those which are perfected only in the fleshy and membranous Members placed in the Face. As to open and shut the Mouth and Lips, the Ey-brows, or Eyes, also to move the Eyes, the hurts of which Motions have two differences chiefly, that either they are defective or depraved.

Voluntary Motions are defective, because they are weakend by themselves or Abolisht, for by accident also when by reason of pain in a part, its Motion is omitted, because it would increase the pain; yet, it is improperly said that it cannot be moved, which case is to be referd to pains, where also it shal be explained.

A Weakness of Motion.

But Voluntary Motions are debilitated, especially the stronger, when they are done with a certain weakness in its divers Kinds, which are Sluggishness, Wearines after labor, a Spontanious Wearines, which we will explain together in the first Chapter of the Weakness of Motion.

Impotency of Motion.

Voluntary Motions are abolisht, both the strong and the weaker, when they are not perfected at all, or at least wise not so much as was needful, as it is wont to come to pass in its diverse kinds, the chief of which are, a Palsy, Spasme, Contraction, and their diverse Species, as a Flatulent Spasme, a Trisme, a wreathing of the Mouth, a Doglike Spasme, a Gibbus, Strabisme, &c. of which we will treat together under the title of Impotency of Motion, in the second Chapter.

The Depravation of Motion.

Voluntary Motions are depraved, chiefly the strong, but with them the weaker also, when they proceed not rightly, or more then was fitting, as it happens in some of its kinds which are chiefly, Restlesness, Trembling, Palpitation, Rigor, Horror, Retching, Gaping, Tinckling of the Eyes, which shall be handled in Depraved Motion, Chap. III.

All motions of Breathing, also are apparent to the senses, and are perfected by divers Organs of the Breast, Neck and Jawes, and that two waies by drawing in and breathing out the Air, which Motion we cannot intermit at our will, when nature doth attempt it; whence it shall be called Natural Respiration, the other is performed only by breathing out the Air with a sound, which with our will we can omit: and it may be called a Voluntary Expiration, or because it utters a Voice, Vocal expiration, which also is twofold, as it brings forth a Voice simply, tis called a Voice; but as it makes an Articulate voice, tis called Speech; the which three, Respiration, Voice, and Speech do vary in that, that either they are Defective, or Depraved.

The defect of Respiration.

They are defective, when they are not done or not sufficiently in many kinds of it, which are, Strangling, Suffocation, difficulty of breathing, Asthma, Suffocation of the Womb, Night-Mare, defect of Voice and Speech, Stammering, which we will describe together, in the Defect of Respiration, Chap. IV.

Evil Respiration.

They are Depraved, when they are done, either not Naturally, or Violently, in divers kinds; as are, quick Breathing, Sighing, Yawning,

Yawning, Hiccups, Sneezing Cough, Hoarſneſs, *which ſhal be explained in* Evil Reſpiration, Chap. V.

The motions of Excretions (under which we may comprehend not only thoſe, when ſome things is caſt forth of the body) which are naturally perfected by the paſſages of the body deſtined for it, that fall under the ſenſe, and are done by our Will, or at leaſtwiſe are regulated by it, are the paſſage through the Gullet, going to ſtool, Piſſing, Bringing forth, which motions in as much as they are functions of the body, are ſomtimes defective, when they are not done, or not as much as was convenient, ſomtimes they are depraved, when they are not retained to the deſtined time, which come to paſs, when the excretion is unſeaſonable, or too much; but becauſe ſomthing is rejected in all of them, we wil deſcribe in the Rejections all ſuch like natural excretions with thoſe Preternatural, but here we wil handle them, in as much as theſe functions are Defective or are not performed.

The defect of paſſage through the Gullet. | *One paſſage through the Gullet or Æſophagus is, which is naturally inwards, in ſwallowing; but the other by compulſion outwards by vomiting, of the kinds of both defects,* viz. the difficulty of Swallowing and Vomiting, *we wil treat in the* Defect of paſſage through the Gullet, Chap. VI.

The defect of Stools. | *The one kind of defect of dejections, which is performed partly by nature, partly by the wil,* viz. Coſtiveneſs of the Body *ſhall be explained in* Defect of Stools, Chap. VII.

The defect of Piſſing. | *The Defects of Piſſing, which the Will effecteth partly and chiefly, yet Nature helping, which are an* Iſchury, Dyſury *are deſcribed in the* Defect of Piſſing, Chap. VIII.

The two kinds of Defect of bringing forth, which motion is made by the force of Nature, our Will aſſiſting which are a Difficulty of bringing forth, *and an* Imperfect Birth *ſhal be explained in* the Defect of bringing forth, Chap. IX.

Involuntary motions are not all of them, but ſome only are conſpicuous to the ſenſes; which Nature alone doth attempt, either for preſervation of life, called Vital Motions, or for Nouriſhment and are called Nutritive Motions, or for Propagation of the kind, and and they are named Motions of Generation, from whence alſo proceed three kinds of hurts of Involuntary motions, viz. *of the Vital, of Nutrition, and Generation.*

The Vital motions do manifeſt themſelves in our ſtrength and in the motion of the Heart and Pulſe of the Arteries, which are hurt in this, that either they are Defective or Depraved.

The defect of vital motion. | *They are defective when they are aboliſht or impaired, in the following kinds,* a failing of the ſtrength, a defect of Courage, *in* the Agony of Death, *which we ſhal explain together in* The Defect of Vital motion, Chap. X.

Vital motion depraved. | *They are depraved when the motion of the Heart and Pulſes are too much or amiſs, in theſe two kinds,* the Motion and Pulſe of the Heart Depraved, the Palpitation of the Heart. *of which we ſhal treat in* the defect of Vital Motion Depraved, Chap. XI.

The Motions of Nutrition or which are made for Nouriſhments ſake being four, to wit, *Attractive, Retentive, Concoctive, and Expulſive, cannot all of them be perceived by the Senſes, neither do we perceive how the Retentive or Concoctive works, or when they are hurt, by the proper hurt of that motion, but we know it by other things which follow from thence. But in Attraction we manifeſtly find that Motion when Nature deſires Meat and Drink; and in Excretion when Nature expels ſomwhat out of the Body by its proper force, we plainly obſerve its motion, as in other Excretions in which our Will is Auxilary to it; whence we meet with only two kinds of the Hurts of the Motions of Nutrion that fall under the Senſe, of Apetency, and Excretions.*

The Motions of Apetency are hurt in the deſire of Meat and Drink when they are defective or depraved.

Defect of Appetite. | *The Appetency is Defective when there is little or no Appetite to them, of which faults, which are chiefly, an* Anorexy, *Want of Stomach, or Nauſeouſneſs,* Apoſitia *Want of thirſt, or a loathing of certain meats, we will treat in* the Defect of Appetite, Chap. XII.

The Appetite Depraved. | *The Appetite is depraved when it deſires either too much, or that which is not convenient, of whoſe kinds which are,* a Bouliny, Dog-like Appetite, immoderate Thirſt, a Pica, *we wil treat in* The Appetite Depraved, Chap. XIII.

Of the manifeſt Motions of Excretions which Nature alone doth perfect, as neceſſary, ſerving to Nutrition, one is of the Blood, another of the Serum another of Milk, the hurt of which three Humors Kinds of Excretions do conſiſt in this, ſufficiently, or they are Depraved when they are made immoderately or out of ſeaſon, in which two ſeeing always ſomwhat flowes forth, in that voided, we wil explain ſuch like depraved Excretions together with all the reſt, as wel natural as preternatural things, which do not offend in defect, but becauſe they are made, what way ſoever that comes to paſs, in the hurts of Excretions, but here we wil treat of them, in as much as theſe Functions are defective.

The Defect of natural Hæmorrage. | *The Ceſſation and Diminution of a natural afflux of Blood, whoſe kinds are,* a Suppreſſion of the Courſes, *and* Hæmorrhoids, a Defect of Purgation after bringing forth, *as alſo of* other Hæmorrages, *ſhal be handled in the* Defect of a natural Hæmorrhage, Chap. XIV.

Want of Sweat. | *One Kind of defect of Sweating out the Serum ſhal be explained in the* Defect of Sweating, Chap. XV.

Want of Milk. | *One kind of Deficiency of Milk ſhal explained in the* Defect of giving Milk, Chap. XVI.

The Involuntary motions which are made for Generation or Procreation ſake, whoſe hurts are conſpicuous, are converſant only about the act of Venery and Conception. For of Bringing forth *we have formerly ſpoken, becauſe the Will doth help that.*

The act of Venery which is perfected by the appetive motion of Nature, rendring the Members fit to exerciſe that Act, and by voiding of Seed in both as wel the Male as Female, ſomtimes is Defective, ſomtimes Depraved.

Defect of the act of Venery. | *Somtimes it is ſo Defective that it cannot be performed, in an* Impotency, Languidneſs Imperfect Venery, *or* Hindred, *or* Extinct *of which we wil treat in the* Defect of the Act of Venery, Chap. XVII.

Salacioufneſs. | *It is Depraved when they Covet it too much in,* Laſciviouſneſs, Venereal madneſs, *a* Priapiſm, *of which we wil handle in* Salacioufneſs, Chap. XVIII.

Defect of Conception. | *Conception which is performed by the motion of Nature, Attracting, Retaining, and Forming the Seed in a Woman only is Deficient or Depraved.*

It is Defective when it is not, as in Barreneſs, *or not as we we would have it, in Defect of Procreating Males or Females, of which we wil treat in* Defect of Conception, Chap. XIX.

It is Depraved when it is done ill, which Diſeaſe ſeeing it

can

can ſcarce be known, and falls not under the Senſes, til that which was ill conceived, be caſt forth; we ſhall rather treat of that in things rejected together with Abortion and the reſt of Excretions.

CHAP. I.

Of the Weakneſs of Motion.

The Kinds.

VVE call that a Weakneſs of Motion, when they exerciſe ſluggiſhly, or ſlowly, or hard- and with ſome trouble, the Voluntary motions of the body, and amongſt theſe eſpecially the ſtronger which have need of ſtrength that they may be accompliſhed, for if upon another account a defect befall them that they are not ſufficiently performed, ſeeing they happen from the ſame cauſe alſo, from whence we ſhal ſhew an Immobility doth proceed, they ſhall be explained there. But this of which we here treat, either is an accuſtomary Sloath, or a Wearineſs ſupervenient after labour, or a Spontaneous Wearineſs foregoing Diſeaſes.

Sluggiſhneſs. Sluggiſhneſs, Sloath, Slowneſs, Idleneſs, loathneſs to do any thing, is accuſtomary to the weaker ſort either by Nature all their life time; or to Infants, and old Folks by reaſon of their age, or thoſe recovering after a Diſeaſe, for ſome time or alwaies after, and other while it is familiar to the ſtronger ſort alſo by reaſon of Lazineſs with which they are more delighted, and do accuſtome themſelves to Sloath, all which can hardly endure heavy labour, nor perſevere long in undertaking it, being rather intent on Reſt and Sleep.

A Wearineſs or Defatigation after Labour, makes that they are not only unfit for the ſame labours which they have formerly undergone, and for undertaking of others, but they feel alſo a troubleſomneſs ſtil remaining for a while, not only when they do ſomwhat, but when they reſt alſo, to wit, that ſenſe of ſtupidity in their Limbs too much agitated, which they call Formication, Tingling, and a certain Diſtenſion as if they were dry or bound up, and therefore they are hardly and with trouble, bent or extended, whence *Galen* hath elſewere called it, a Squallid Wearineſs. Or if they be Cacochymical they perceive that painful ſenſe of which we ſhal ſpeak by and by in a Spontaneous Wearineſs; this doth more or leſs ſhow it ſelf, according as the whol body or its parts have been ſtrongly exerciſed, ſeeing the whol body is ſomtimes ſo caſt down by wearineſs, that even in reſt or lying down the wearineſs doth not wholly ceaſe, ſeeing in that too there is ſome attraction or extenſion of the Members by the Muſcles; whence they are forced by night variouſly to toſs their body, that they may find a fit ſituation for their body, in which they may commodiouſly reſt and ſleep: but ſometimes certain parts which endure the labour do only feel it, as the Feet after a long Journey, the Arms after long continued blows, the Hands not only after Stronger motions, but alſo as I have often experienced, by long and much writing, as alſo I have obſerved that the Mandible may be wearied by much ſpeaking; and that the weaker motions alſo, of the Eyelids, Lips, Eyes may be tired, even this doth manifeſt, becauſe thoſe that are Weary can ſcarce liſt up their Eyelids, a ſure ſign of Sleepineſs and Wearineſs.

A Spontaneous Wearineſs, that is, not proceeding from Labor, but hapning of its own accord, ſuch as *Hippocrates* teacheth doth threaten or forego Diſeaſes, doth manifeſt it ſelf in the Limbs, with a certain ſenſe of pain, which either offering it ſelf in the ſuperficies of the Skin, and the Fleſh under it grows worſe by touching, expreſſing ſome ſenſe in the parts, and that is, either of an Ulcer, and it is called an *Ulcerous, Elcodis wearineſs*, or of an Inflammation, and it is called an *Inflamatory Phlegmonodis wearineſs*: others feel that painful ſenſe deeper, and that either about the Joynts, as if they were retcht, becauſe they are hardly moved, and it is called a *Tenſive, Tonodis wearineſs*. Or about the bones themſelves, as if they were bruiſed, and tis a contunding wearineſs which *Galen* hath named *Oſtocopum*. And alſo more Species of theſe troubleſome ſenſes meeting together, are joyned with this wearineſs.

The Cauſes.

The Cauſe of every weakneſs of Moving is, either feebleneſs of Strength, or too much intermiſſion of Motion or Exerciſe, or Idleneſs; or exerciſe or Labour, or plenty of Humors.

Feebleneſs, the Cauſe of weakneſs of Motion

In Feebleneſs, as all Functions are weakend, ſo eſpecially voluntary Motion, becauſe a greater ſtrength is required to exerciſe that; but this happens by reaſon of the defect of Native heat, either ſucceeding in old folkes by reaſon of Age, who are therefore ſluggiſh and preſently tired, or proceeding from a Morbifick cauſe, as after too great Evacuations; or iſſuing from the Diſeaſe by reaſon of the continuance of it, or Acuteneſs, or Malignity, overthrowing the ſtrength, that weakneſs ſtill remaining for ſome time even in thoſe recover'd of the Diſeaſe, or alwaies, when they have contracted, as they call it, old Age by the Diſeaſe.

Idleneſs, the Cauſe of Sluggiſhneſs.

Thoſe that Indulge too much to Idleneſs, either from a perverſe Cuſtome, or being hindred by the bulk or fulneſs of Body, are leſs exerciſed, are Sluggiſh to undergo even the lighteſt labors and are quickly wearied.

Labor, the Cauſe of weakneſs.

By Labor or exerciſe both of longer continuance, and ſtronger then is conconvenient for every Nature, the Body becomes Sluggiſh and Weary. For, becauſe nothing can laſt long that wants its reſt by courſe, it comes to paſs, that thoſe who are exerciſed longer then tis fitting, or who take a long journey, and Labor all day, become wearied: ſo alſo they are tired, if they be long about a ſtrong and vehement work in doing of which, there is need of ſtrength or quickneſs. And that becauſe the Muſcles Nerves and Tendons are retcht when the Limbs are bent, the joynts extended and brought about, and then alſo when they reſt, the like ſenſe and diſpoſition remaines, as was wont to be in the Motion, and there is felt a Tenſive or Stretching wearineſs. And then becauſe the Members grow hot by Motion, they become weary, for ſo there is a certain Conſumption of the viſcid Humor, with which the Joynts are beſmeared to exerciſe their Motion the eaſier, not a Colliquation of fat, as ſome would have it, (of which the joynts are wholly deſtitute) which Humor being waſted, the Members as being made dry do bend more hardly, and they ſeem as it were to be retcht. Alſo by reaſon of that heat raiſed in the Members by Motion, the blood provoked to the outward

Fleſh

Flesh and Skin, doth cause there a sense of Inflamation, or if it be acrid and thin it shews some sense of an Ulcer, or if it be Cruder, it only oppresseth and distendeth.

A Plenitude and Cachochymy, are the Cause of Spontanious wearinesse.

If the body be loaden with plenty of Humors, tis presently wearied, not only when it Labors, but also without exercise tis troubled with the said Spontaneous wearinesse, which also doth foretel that Diseases, by and by will follow, from that Redundancy of Humors; thus in a Plenitude of blood, there is felt a Tensive and Inflamamtory wearinesse; and in a Cacochymy of Cholerick, Sharp, Salt Humors, an Ulcerous wearinesse, in that of crude cold Humors, a contunding and gravative wearinesse.

The Cure.

The Cure of Sloath and Wearinesse, caused after labor; and of that Spontaneous, from what cause soever.

In the Cure of Defatigation, caused after Labors; we need not take much pains, seeing they return to themselves of their own accord; but in that which comes of it self: because it is a foreteller of Diseases, we ought to provide, not so much to correct the Wearinesse, as that Diseases do not follow. Sluggishnesse, because it doth weaken the body, and makes it languid, is not to be suffered: that which ariseth from the want of native heat, is scarce or never taken away: yet for the mending of all which, we do use, either Restauration of strength, by Rest, Exercises, course of Diet, Baths, or other Applications, or Evacuations.

Rest Cures Wearinesse after labors, the labor then ceasing, but chiefly being caused by sleep; because in that the Members do rest better and that especially if they be placed in that Scituation and form, which is called a *Meane*, all the Muscles being relaxt, so that they suffer no violence whether crooked or straight, yet let every Member have its competent Figure, and also because by Sleep, the Humors too much provoked by Motion, are discust, therefore weary Bodies are better refresht by this means.

Exercise, doth correct Sluggishnesse, sprung from Idleness; if they accustom to exercise their Body with that, which is most delightful to them, or is necessary for the sustaining of life, the weaker sort, or those who by reason of a greater bulk of Body, cannot undergo business or exercise; by gentle means which they may perform themselves, or with which they may be exercised by others, as by Frictions, become fitter to undergo labors; it corrects also wearinesse contracted by vehement labor, if it be more gentle then the former, for so it doth better reduce weary bodies to rest, then altogether rest, seeing every suddain change is hurtful, as it is done by going, walking, after running, and other stronger works, rather then by setting still. And thus *Galen* saith one wearinesse takes away another, if to that of yesterday, the like be applied the next day; also a motion contrary to the former Motion, doth refresh wearied Bodies, as if one be wearied with climbing up a hil, by going down again, he will sooner be eased: and again because gentler exercise doth discuss the Humors called forth by that which was more vehement, upon that account, also it cureth painful wearinesse; for which reason the Ancients did not only dispose their Bodies by Friction before Labors, which for the most part they underwent for healths sake, to relax the parts, and make the Excrements fluid, which they called *Præparatory*, but also after Labors they applied it at last, to relax the parts more, and to purge away the Excremants attracted, and they called it *Apotherapia*. And they made a gentle Friction by which the Body was lightly heated, to loosen and relax, which they called soft and little, or a stronger Friction in which the part was more heated and dilated, which they called, hard and much; and they maintained that this did diminish, that did bind: or a mean Friction which in quality and quantity and strength, was the middle between these: to which operation of the Hands, they applied also anointing with common Oyl, or Oyl of Savin, that it might be the better accomplisht instead of which we may take Oyl of Chamomel or sweet Almonds.

A moist and hot Bath may make good the use of Friction, and in our Age tis more usual, whether the greater part of the Body, or only the wearied parts be dipt in it, as the Feet after running, which doth wonderfully refresh weary Bodies, resolving as Friction doth, by an actual moderate heat, either more or less increased, and provoking the humors, and relaxing the bound parts: which is prepared of simple water in which sometimes are boyled Mallows, Chamomel, Betony, Hyssope, Organy, Pennyroyal, Sage, Ground-pine, Mugwort, and other things to encrease strength, after the use of which, anointing is convenient, as in Friction.

Other applications, as anointing of it self, administred without a Bath made especially along the Backbone or the wearied parts may alone mitigate wearinesse as also Friction, and a Bath, yet more lightly, when the lesser Friction is made with anointing, and the actual heat in the Unguent is less: *Dioscorides* teacheth that Mugwort applied to the Feet with grease, doth take away wearinesse after a journey, and if a Traveller carry Mugwort with him, some teach he shall not be wearied in his journey; some relate for certain, that the same comes to pass if the Feet be anointed with Goose Grease.

Restaurative meat and drink doth Egregiously refresh weary Bodies, and that especially by giving of Wine, which recreates the weary and makes them active, and the weaker sort also that are more sluggish to all operations by these things do assume some strength.

Evacuation in a Spontaneous wearinesse proceeding from plenty of Humors, doth take it away, by carrying the Humors away; and doth prevent, that the Bodies fall not into Diseases, which shall be done by drawing of blood in a Plenitude, and in Cachochymical Bodies, by Purges appropriate to the Redundancy of Excrements.

CHAP. I.

Of the Impotency of Motion.

The Kinds.

WE call that an Impotency of Motion, which also we may call an immobility, when either we cannot at all, or not sufficiently perform those motions which are made by our will only, the which seeing they are many and various in the Body, so many & divers kinds also of Immobility do offer themselves; of which sort are, in the defect of stronger Motions, not to be able, or hardly able, to raise one self up, or

bend; to ſtand or go, to lay hold on, and handle things, to take things firmly and break them with the Teeth; but in the defect of weaker motions, not to be able to open or ſhut the mouth or the Lips, the Eyes or Eyelids, or caſt about the Eyes.

Which firſt of all do chiefly differ in this, that in ſuch like Immobilities, ſometimes the member which ought to be moved, is Relaxed and Languid, and it is called a Palſie, a Reſolution, which is as it were a particular Apoplexy, when that is done without an apparent hurt, but if it be with a hurt it is called according as that is, ſomtimes a Fracture, ſometimes a Luxation, ſomtimes a Wound: but at other times the member is attracted or for a time Convulſed and then it is called either a Spaſm, or particular Convulſion to diſtinguiſh it from a general Convulſion which we have called an Epilepſie and Catalepſie, of which the Spaſm here properly called is a part, ſeeing it is improperly alſo called a Spaſm which the Germans call *Krampf*, the Arabians *Alcuzez*, of which notwithſtanding the cauſe is far otherwiſe, than of a true Spaſm, whence this alſo is called Flatulent; but at other times, when the member is attracted 'tis only named a Contraction, a certain perſevering ſtiffneſs of ſome member, which particularly if it be in the back is called a *Gibbus*; which names afterwards we ſhal uſe in this ſignification; but in theſe kinds of Immobility ſomtimes more motions together do fail, ſomtimes particularly only ſome.

The immobility of many parts together, or a general Palſie or reſolution is a ſpecies of general immobility.

Somtime more of the foremention'd Motions are taken away together, in a Palſie therefore called General, the Members which ought to exerciſe motions, being Palſied, Languid, and impotent, without pain, as how this comes to paſs in every motion, we ſhall ſhew in particular Palſies: which ſometimes happens in the Members of both ſides, and in their motions, which Species of a Palſie is called *Paraplegia*; but ſomtimes this happens in one ſide only the right or the left, which Species they cal *Hemiplegia*, in which nevertheleſs this moſt commonly falls out, that either ſide of the trunk of the body being palſied, and its motions aboliſht, the motions of the reſt of the parts placed in the Face, remain ſound and whol, ſomtimes ſome only receive dammage, as the motion of the Lips, but alſo to the forementioned Immobilities of voluntary motions ſomtimes are joyned ſome other Defects of the motions of Reſpiration and Excretions, as ſhal be explained in their places: amongſt which Speech often faileth. And it happens alſo that both the Voice and Breathing do ſuffer hurt together that when they would ſpeak out any thing clearly, or fetch breath ſtrongly, they are vehemently troubled with crying out, Laughing, Weeping, Coughing, and in danger of Suffocation. To theſe ſomtimes is added, that they cannot retain their water, and they caſt forth other Excrements.

But alſo beſides theſe Defects of Motions, the ſenſe of Feeling is aboliſht in the palſied Members; yet ſomtimes that alſo remains, ſeeing a Palſie is a ſymptom of Motion rather than of Senſe.

But in others there is diſcovered rather a Stupidity with ſenſe of Formication or of Heat or Cold, as hath been ſaid in a Stupidity. In a peculiar Palſie but very frequent in our times which follows the Collick pains, beſides a reſolution of certain parts, which oftentimes is wont to begin and continue with a trembling of the Member, a grievous and cruel pain doth moreover poſſeſs the palſied Members: which Palſie is wont for the moſt part to turn to Convulſions, and kill the Patient.

A Spaſm or particular Convulſion is a Species of general immobility.

Some would have it, that all the Voluntary Motions may be aboliſht together, and all the Members may be convelled, or rather be rigid, and as it were congealed, in the ſaid Spaſm, as it is in an Epilepſie and Catalepſie, ſo that it ſhal differ from them, eſpecially from a Catalepſie, no otherwiſe, than that here, becauſe the ſenſes remain otherwiſe than in them, they feel cruel pains in their Members; which Diſeaſe *Celſus* hath called a *Tetanos* or Rigor, and *Galen* hath reckoned it amongſt the peracute Diſeaſes, becauſe it kils a man in four daies ſpace, and he hath declared that it is very rare, ſeeing the cauſe which cauſeth it muſt needs be great as he ſaith, which can breed ſuch grievous pains, that it doth rather cauſe a true Epilepſie, or Catalepſie.

A Tetanus or Rigor is a ſpecies of Spaſm

Yet it comes to paſs more frequently that a Spaſm doth not invade at once all parts, but only ſome, which otherwiſe as ſhal be ſaid, it is wont to poſſeſs ſingly, and it is perceived in the Back and Joynts, and ſome parts of the Face, ſomtimes alſo for the ſame reaſon as a Palſie, doth by ſlackning, ſo this by contraction, doth prejudice, the Speech, and Voice; which particular Convulſion, certainly manifeſting themſelves in many places, are the Foretellers, and as it were the Preface, and ſomtimes the beginnings of a general Convulſion or Epilepſie by and by to follow, but ſometimes are the relicks remaining after a Paroxyſm of an Epilepſie that went before, which is now caſt off, as hath been ſaid in an Epilepſie. And we have ſeen alſo in a certain man a certain Spaſm of the Members that hath laſted twenty yeers, ſomtimes abating a little, ſomtimes contracting the Back, Feet, Arms, and moreover with a pain running up and down, wonderfully afflicting him; ſo that at the leaſt touch of any thing he would cry out, and the pain beginning in that place, & diſcovering it ſelf by a yellow ſpeck which preſently grew, now it runs like an Air into the ends of his fingers, by and by into the tip of his Noſe, and other outward parts, at the touch of the which he cryed out: and alſo that Spaſm which they call Flatulent is oftentimes wont to moleſt many parts at once, and to be troubleſom to certain men by Fits, which doth not ſo much differ from a true Spaſm, both in the cauſe, and danger.

A flatulent Spaſm.

An immobility of private parts or a particular Palſie, Spaſm, Contraction, is an impotency to exert or bend the body.

Somtimes alſo Voluntary motions may fail apart, their parts being ſlackned, or convulſed, or contracted, or otherwiſe hurt, as being now about to explain theſe in particulars: by what means it may come to paſs, we ſhal reckon up divers particular kinds of impotency of motion.

Somtimes a Raiſing up or Bending of the body cannot be performed, the back being palſied which ſcarce happens to theſe motions of the back apart, but alſo with other motions taken away too, as hath been ſaid in a general Palſie: from this Spaſm in the back it ſomtimes happens that tis convulſed, as the ſenſes being entire, we have ſometimes ſeen that by this means it hath a long time bent one upwards from the bed, and again relaxing him ſmite the bed: the which alſo may happen from a Contraction without a Spaſm, firſt of all in general, that it cannot be bent, and the body remain rigid

A Tetanus Epistotonos Opisthothonos are a species of contraction.

gid & stretched in that called a *Tetanus* or Rigor (which name although they apply it only to the Back Convulsed, yet we also may apply it to that, if it proceed from a Contraction) or that it cannot be erected, and they go with a crooked body, and it inclines either to the foreparts in that called an *Epistotonos* or to the hinder parts in an *Opisthotonos*, or to either side. Also some part only of the Back being contracted its motion is somwhere stopt, either some part of the Back bunching forth backwards in that called a *Gibbus*, or towards the sides, or which seldomer happens it being bent forwards, and that in every one more or less, and a greater or lesser portion of it being carried thither; whence they cannot erect the Body and they shew it short, crooked, with an uncomly figure of the breast, the breast especially hanging out very much, and the Back prest in, and the Head inclining backwards if the Back be crookt to the foreparts, but the Back appears immoveable also by another means, it loosing its motion by a Contusion or Wound.

A Gibbus is a Species of Contraction.

Going and Standing, Holding things, and Handling them, somtimes cannot be deformed; and that oftentimes, the Thighes, Arms being palsied, but chiefly the Hands, Feet, and their Fingers and Toes their motions being taken away apart, or many together, as hath been shewed in a general Palsie; and then one part, or more so affected do languish, and hang, and cannot be moved but by the benefit of a sound part, and because they are idle, they are found cold and moist by the touch; and somtimes are insensible or stupid, after divers manners as hath been said formerly; also some motions of them are sometimes hindred by a Spasm and certain parts causing them, either more or fewer are troubled with it, not only with that which is called Flatulent which doth so often cramp with the highest torment the Toes of the Feet and somtimes also other parts, but also certain rudiments of a true Spasm do create trouble in these places, for the same reason as a Flatulent one doth, such a one as we have said in the causes of an Epilepsie hath sometimes manifested it self upon the taking of a violent Medicine; and also the motions that are perform by the Joynts do cease, if these parts are contracted, which if it be done singly is wont to happen to some one only: whence they appear Crooked, Bowed, or Stiff; which is a permanent and frequent evil in the Feet and Hands and their Fingers and Toes, in those whom the common people call cramped, although when these parts are palsied and pendulous about the Wrist, they are bound up and contracted in the Fingers, and Atrophy moreover of the Hands supervening especially betwixt the Thumb and Forefinger, the flesh being wasted there, and a conspicuous hollowness appearing, an evil most commonly remaining after Collick pains: this happens also with another fault of the forementioned parts in form and situation, that they cannot be moved, when either being abreviated, or otherwise crooked, bent or hurt in their length, or about the Joynts, they are found to have changed their scituation, and that with pain of the place especially whiles they endeavour to move their Limbs, there being joyned somtimes a heat with a tumor and somtimes a hollowness appearing in one part, especially about the Joynts, they and a certain protuberancy in the opposite place to it, as we shal shew in the causes doth befall broken and luxated bones, where also we shal explain how an Immobility of these parts doth happen with a Wound and other manifest Hurts.

The Contraction of those which the Germans call Contrakt *is a Species of impotency to go or lay hold of a thing.*

Somtimes they cannot take things firmly and divide them with their Teeth when the inward Cavity of the mouth can no waies be shut, but remains open with the Teeth drawn asunder and the Mandible hanging down; and that comes to pass without pain that being palsied which seldom happens particularly to that, much less in a general Palsie; or with pain and trouble that being palsied, the mouth standing right or crooked if this come to pass only in one side, somtimes there is some other eminent hurt, or a solution of Continuity. But at other times the Mandible cannot be opend, and 'tis exactly bound up, or only in one side, with the Teeth joynd together, neither doth it suffer them to take in meat, or any thing else, and it is either a Spasm called by a peculiar name *Trismos* if it befal this part, or some other Contraction: somtimes the Teeth being set on edg by this trouble, they are hindred in chewing of meats.

An Impotency to Bite and Eat.

Trismos a Species of Spasm.

Somtimes they cannot shut or open their Mouth, or decently joyn and disjoyn their Lips, which chiefly prejudiceth Sucking and Supping; and then the Lips either are wanting or they hang down being palsied chiefly in a general Palsie, seldom in a particular Palsie only of this part, but most commonly it happens in the Palsie only of one side that this motion might not altogether perish, seeing both the right and left part of the mouth joyned together, makes one month, one side of which being hurt, the other remaining moveable doth draw the immoveable side, & then the Lips with the Cheeks hang down on one side only. As also if they be convelled or contracted on one side, they also are drawn thither upwards. And because then in both sorts, one part of the mouth hanging downwards or drawn upwards, the mouth is rendred Oblique & Wreathed as it is wont to appear in those that cry, whether it be from a Resolution or Convulsion or Contraction, they have called it, *a wreathing of the mouth*. But if the Lips with the Cheeks are drawn together on both sides in a Spasm, then the Mouth is wont to be seen drawn transverse, as in men Laughing, or in Dogs when they gape being angered, and they call it a *Dog-like Spasm*; as indeed Laughing also and Crying are kinds of a certain particular Spasm or Cramp, seeing they do involuntarily so distort the mouth, as by and by shal be said in the Causes.

An Impotency to open and shut the mouth.

A wreathing of the mouth, is a species of Spasm.

The Dog-like Spasm, a species of Spasm

Somtimes also they cannot cover and hide their Eyes with their Eyelids, and the Eye remains bare and open, and is more exposed to external injuries, which evil some call *Gessa* and whom this befalls, they rest not commodiously in sleep, which is best acted with the Eyes shut, Seeing being so hindred; which discommodity may also come to pass by a Palsie, for although it were palsied, nevertheless it would remain collected in the upper part of the Eye (for so the Eyelid ought naturally to be when it is not drawn, whence also in the dead their Eyes remain open) but this

An Impotency to open and shut the Eyes.

this yet scarce happens, unless the Palsie be altogether general, as in the Apoplectical their Eyes continue open: but as this sometimes happens from a Tumor which then also appears too, so frequently that the Eyebrow and Eyelids, when the Cheeks palsied do hang downwards, do somwhat appear depending on the outer side also. But if the Eye cannot at all be opend, then the Eyelids drawn over the Eye and gathered together do hinder the sight, but if they be only lightly drawn asunder then they are said to wink with their Eyes, the which notwithstanding in some doth more rightly direct their sight than hinder it; this also scarce happens from a Spasm that the Eye is wholly covered (unless this fall out with an impediment of the motion of the Eye, as shal be said by and by) as it is that the Eyebrow is somwhat drawn down with the Cheeks; yet sometimes that also comes to pass from some private hurt or Tumor of it, which sometimes meeting in the Eyelid, or Eye, bring such an Impediment, as shall be said there: in sleep they wink naturally.

An Impotency to rowl the Eyes.

The rowling or moving of the Eye is scarce abolished, unless in an Apoplexy, with which those that are taken have their Eyes fixt, and alwaies with the same aspect, as hath been said there, and in Convulsions also they appear Convelled, Contorted, and as they call it Broken.

Yet sometimes also a certain short Spasm or Cramp as it doth convell the other Members, so the Eyes also with a certain pain, not suffering them so long to be rowled, as neither the Eyelids to be opened.

The which befals some rouzed out of a deep sleep, that whiles they endeavor to open and move their Eyes, seeing they are bound up as it were with a Spasm, yet they cannot do it last, but with Labour and Pain.

Squinting a sort of Contraction.

Somtimes also Squinting is caused, rather by a Contraction from the birth than by a Convulsion, the Eye being somwhat perverted, and the Eye a little turned hither and thither, looking upon one not streight but obliquely, it rather gives a stern Aspect than hinders the Sight, seeing the apple is scarce carried so far as to be hid by the Eyelids.

The Causes.

Every Cause of the kinds of voluntary motions hurt, both of the stronger and weaker (which we call impotencies) is either in the Organ sending, or communicating the power of moving not in the principal the brain: for then also the internal senses should cease together with motion, as hath been said in their hurts, which comes not to pass here, but 'tis in a Nerve or the Instrument which moveth, a Muscle, or in the part which is moved, as we shal now explain.

The cause of a Palsie in the Nerves.

The Nerves (under which name we comprehend both the Spinal marrow and Nerves) seeing they are portions of the brain, every where ful of animal spirit, which by conferring their proper substance on the parts with the spirit, do communicate the power of moving & feeling; if they be so hurt, that they can no more do that, than one or more Muscles into which they are inserted, loosing that power of moving, and no more attracting the member which it ought to move, there follows a resolution of it, or Palsie, that is, it becomes languid and unfit for motion, the sound part then, as they say drawing the sick: and if the hurt be vehement the sense of Feeling also is taken away too, not only in the Muscle, but in the Skin drawn over it, which receives sensory Nerves from the same Nerve that is hurt. Or if the hurt be not so great, because greater force is required to exercise Motion, then to confer the sense of Feeling, this sense may subsist either whol, or impaired, yet the Motion being taken away: as also if another cause moreover be joyned there may also be felt a pain or trouble too, in the part (although it be immoveable or hardly moved) as we shall now describe, both what Nerve, and by what Disease affected, doth produce the diverse Species of Palsies.

This hurt of the spinal marrow often happens, seeing it is very much exposed to external injuries, and because it lies under the Brain, fit to receive its excrements; which if it be affected in the beginning of its passage made by the Brain through the Back-bone, next to the Brain, by depriving all the Nerves, which spring from that, of the Animal spirit, it makes a general Palsie, in which all Voluntary Motions cease, as well the stronger of the Body, as the weaker of the parts of the Face. And besides these, Breathing, the Voice, and Speech, Swallowing also, and some Motions of Excretions do suffer some hurt, as hath been said, if the hurt be neer to the Brain and great: because the Conjugations of the Nerves do issue forth there from the beginning of the spinal Marrow, and then also are hurt, as shall be said by and by; but if in the rest of the progress of it, there happen any such hurt to the Back, then by taking away that faculty from those Nerves only, which are under it, it makes those Members Palsied, into which they are inserted; by whose hurts it is easily known, where the cause durkes in the spinal Marrow: which in what place soever it is, if the hurt be in both sides, the cause is in both, if only in one (as the spinal Marrow is perceived to be truely distinguisht) the Cause only in that side, makes a Palsie, and by so much the more general, by how much that is affected more towards the Original.

If paires of Nerves proceeding from the Spinal marrow be hurt, then according as a general Nerve communicating Nerves to many parts, or a special one communicating to some only, is seazed with the Disease, more, or one part suffers a resolution, by which also we shall easily find out, what Nerves are affected, if we know which are communicated to every part: and hence many Particular resolutions may be made in the Members, which have received Nerves from the paires of the spinal marrow, yet not in all, because the Muscles moving the Breast especially the Midrife, and those of the Belly also being compeld by a necessity of breathing, especially seeing breathing is caused also by the help of natural Motion do nevertheless perform their office in the palsied, in respiration and casting forth of Excrements; hither also makes somwhat, that the Midrif doth receive Nerves not only from the spinal marrow, but also from the conjugations of Nerves as shall be said, as we shall declare things further in the defect of Respiration; besides which parts, the rest which are moved by the Muscles, may suffer a resolution.

The Contractions of Nerves derived from the Brain that do communicate Motion, if they suffer a Disease, then that part is hurt, to which the Nerve hurt is peculiar, and by the Palsie of the part, the Nerve affected is known; as if that called the second Conjugation of Nerves derived to the Muscles of the Eye be affected, there is a Palsie of the Eye, the which nevertheless can scarce

scarce be done in this Nerve unless the neighbouring Brain be hurt, as it comes to pass in an Apoplexy, but as more commonly the Conjugation of Nerves carried to the Face, Lips, Ey-lids and temporal Muscle, being affected, there is a resolution of the Lips and Ey-lids, but seldom of the lower Jaw; seeing the Temporal Muscle doth receive more Nerves: and if the Nerve of the Tongue, called the third Conjugation doth suffer, the Tongue being Palsied, the Speech suffers a blemish and then commonly by reason of its communication with the Auditory Nerve, if the hurt be so great that they become wholly mute, they are Deaf also: The same may happen in that conjugation of Nerves, which they call the sixth and seventh, which falling from the Brain, and joyned into one descending Nerve, and communicating the sense of Feeling to many Interiour parts, and giving also Motion to the Muscles of the Laryux, Tongue, Jaws, Midrife; also to the Muscles of the Bladder, Fundament, if it be hurt about the original or somwhere also in its Progress, it breeds Palsies of the parts into which it is inserted, if they be moveable, in others a certain sense of Stupidity, and hence if the recurrent Nerve be affected, there is a defect of the Voice and Speech, if the Nerves which go to the Muscles of the Jaws be hurt, seeing swollowing is caused by them, and not by the Fibres of the Oesophagus, as they have thought, there follows a difficulty of swallowing, and also there comes some Impediment in Breathing, if the Nerves which go to the Midrife be hurt, and that especially in violent sending forth the Breath, when they would utter a great Voice, or are compeld to Cough, for then not being able to express it, they come into some danger of Suffocation; because otherwise for the perfecting of moderate breathing, the Midrife which causes it, seeing it doth receive also from the Spinal marrow, as hath been said, it can nevertheless in some sort perform its office, although these Nerves be hurt; in which hurts of Motions, an offence of the sense of Feeling being joyned, that sense of heat and tingling doth so much molest the sick about the Stomach, especially where the Nerves are greater, and about other internal parts, as hath been said; but if there be a certain general hurt of the same Conjugation; because then both the Sphincters of the bladder and Anus, and the rest of its Muscles are Palsied, an involuntary Pissing moreover, and a relaxation of the Fundament, is coupled with the other Species of a Palsie, as we shall explain all these more at large in the defect of breathing, and of Excretions, and in the difficulty of swallowing.

The Diseases of the Nerves, from whence a Palsie is.

But the Disease with which the spinal Marrow or Nerve is possest, is that, which deprives it of the Animal spirit, which it hath need of to exercise its Function; for being so affected, it can neither any more communicate to a Muscle the power of moving, nor to the sensible parts the power of Feeling, if the Nerve be wholly destitute of that, and the remaining part of it from the place affected even to the part, into which it is inserted, becomes unprofitable. As it comes to pass, if its continuity with the part be broken, for then this passage is interrupted: or if the Nerves be so straiten'd, that the Animal spirit, which requires a free passage through them, can no longer pass through them, or fil them up, or not sufficiently; seeing, though it be most thin and subtile, and doth Illustrate the Nerves like the rayes of the Sun, yet nevertheless it may be hinderd, as the Sun Beams also may: as this happens if it be so prest in any part of it, that its substance doth wholly sink down, or if its substance be so condensed that also by this means the passage for the spirit is intercepted. And also the same may fal out, if some part of the Nerve do so labor of a distemper, that it can no waies perform its Function; as how these Diseases, *viz.* A Solution of Continuity, a Straitness of the Nerves, a Condensation and simple distemper, or with an Afflux of Humor, and Repletion, or with a preternatural Tumor, or some fault of the Organ do proceed from Internal or External Causes, to wit a Flegmatick humor, or Bloody, or from a distemper, or some hurt by Compression, Ligatures, or from a wound, or some other blow, we will now expain.

As it hath been explained in the Causes of an Apoplexy, that an Apoplexy which is a Palsie of the whol Body, is generated from Flegm or a Watery, Serous, Cold, moist Excrement of the Brain, bedewing the brain or pressing the original of all the Nerves, so if this happen in the Nerves a Palsie is generated; for such a humor, heaped up plentifully in the Head, for the causes there assigned, and cast off from the Brain in an Apoplexy which it hath first produced, or without that, falling down from the Head, not though the substance of the Spinal Marrow, or Nerves, but either discending through the Cavity of the Vertebraes of the Back, which doth contain the Spinal Marrow, and there stopping about the beginning or progress of it, or sliding down further through the passages, which the paires of Nerves proceeding from the Spinal Marrow do every where run through in the Body without any Connexion, or falling from the Head and following the like passages of the Conjugations or pares of Nerves and somwhere sticking about the Nerves, in what place soever this happen, whether about the Spinal Marrow, or about the paires or Conjugations of Nerves, by compressing or bedewing them, as if this come to pass in the Brain it procreates an Apoplexy, so if it happen in the foresaid places it produceth a Palsie, of more or fewer parts, according as a general or particular Nerve is affected: whenas if plenty of Humor flow thither, in those narrow places compressing the Nerves with its weight, it may also intercept the passage of the Animal spirit, as hath been said formerly, and by so much the longer, if being detained there by a long stop, it become thicker and Mucous; but principally because by its moisture it continually bedewing, filling, and cooling the substance of the Nerves, it destroies their proper temper in that place, and hinders that they cannot be filled with the Animal spirit, nor enjoy it: whence also by reason of the interposition of this unprofitable part of the Nerve affected, the other part of the Nerve which is carried to the parts, being also made unfit to exercise its Function, there must needs follow, if the hurt be great, a perfect resolution of the parts unto which these Nerves are communicated, and that by so much the more lasting and pertinatious, by how much the hurt of the Nerve is greater, which we have found by dissection to be the true cause of a Flegmatick Palsie, the spinal Marrow being swelled up with a watry Humor, that there is no need to phansie here any obstruction in the Nerves which are solid, or made up of Filaments; nor any Cavity which may admit that thick humor, as some do write. Or if indeed they do grant this moistning of the Nerves: yet to assert that that comes to pass by this means, because the Nerves being made longer an slacker, they become unfit for motion: because as hath been formerly said, the Nerves do no waies attract the part; and far less to contend, that a Palsie is from the same Flegm as obstructing the Nerves, for filling of them, so it must needs be that Convulsions,

do ensue, which we call Contractions, and for that cause to assign the same Cure to them both.

Other humors possessing the Nerves are the cause of a Palsie and Spasm.

But also such an excrementitious humor from elsewhere than from the Brain, being carried to the Nerves of certain parts, or heaped up there, doth induce a Palsie proper to certain parts; which oftentimes also mixt with other acrid and cholerick humors, or otherwise putrifying, not only by bedewing but also by irritating the Nerves doth cause pains offering themselves with the resolution of the part and sometimes ending in Convulsions as this hath been said in Convulsions; such a kind of Palsie as hath be en explained in the kinds, as is wont also to happen in Colick pains, with torments of the Limbs, Heat, Tingling, and other troubles.

The same might come to pass from Blood out of the Vessels falling into these Cavities of the Nerves and retained there a long time; but seeing that doth presently putrifie it doth sooner breed an Inflammation, as also if it insinuate it self into the substance of the Nerves, whence other accidents do follow rather than those of a Palsie: but in the Veins if from a fulness, or non-natural situation of a Member (as if the Arm be held a long while lift up on high) the blood be carried into one place more plentifully, because then in some sort it presseth a neighboring Nerve, seeing the Nerves are alwaies wont to follow the course of the Veins, it rather causeth a light Numness or Tingling, than any Disease or long continued Palsie; the blood easily going back again, and not so stopping, but as in the brain it is abundantly powred forth into its ventricles, it may may cause an Apoplexy as hath been said there.

A Tumor of a Nerve is the cause of a Palsie.

Also a streightening may be caused from a hard Tumor of a Nerve, as from a Callus or a Skar after a Wound, or bruise growing in the Nerve, or from a bunching out arising from the proper clammy Nutriment of a Nerve which doth stop its animal spirit; but from an Oedema, which also they hold to be the cause of it, that cannot be done, unless some one would call it Irrigation and swellings of the Nerves, as hath been formerly said, an Oedema; the same also may happen from the Tumors of other parts pressing a Neigbooring Nerve.

The fault of conformation in a Nerve is the cause of a Palsie.

By the fault of conformation or shaping from the birth, the Nerves being not rightly formed or otherwise carried, the same also may come to pass, which often happens in the Nerve of the Tongue as we shal by and by explain in the defect of Speech, that they are born Dumb and Deaf, as hath been said in the hurt of Hearing.

A cold distemper of a Nerve is the cause of a Palsie.

From a Cold Distemper, or too much cooling (as we shall by and by explain in the Muscles) if not only the Muscles but also the Nerves themselves with the Muscle into which they are inserted, or without that, in their course out of the Muscle, seeing Cold is a very great enemy to them, be so affected, that they are either bound up and condensed by Cold, whence the animal spirit hath no longer a free passage, or be so hurt, that their function perisheth, then also there follows a Palsie of those parts whose Nerves are affected.

The Driness of a Nerve the cause of a Palsie.

Trallian teacheth that there is a Palsie caused from driness and heat, which certainly must needs fall out so, if it be such as may harden the Nerve that the spirit can pass through it; as the same may come to pass from the Causes to be explained in the exiccation of the Muscles.

The Compression of a Nerve is the cause of a Palsie.

A vehement and lasting pression of a Member, caused by a heavy burden, or some other force, especially in that place where the Nerves are greater or lie bare under the skin, first of all the spirits being repulsed, hindred, and running up and down, induceth the sense of Tingling in a stupidity, by and by an abolition of motion, and at length a perfect stupidity in the part, into which the compressed Nerve is inserted; this often comes to pass when at rest, especially in the time of sleep one part lying long upon another, as the body on the Arm, one Foot on the other, and pressing the same it renders the part immoveable and insensible and as they call it asleep: but if that this compression be suddenly caused with a strong blow of a Nerve, then there is only felt some stupidity yet mixt with pain and a sense of Tingling; as this is often wont to fall out by chance in the stricking of the Elbow there where the Nerve lies almost bare; and in the Ring-finger and little finger.

In vehement Ligatures of the Members, chiefly if a Nerve be contained in the bandage, the motion and sense of Feeling of the part do cease, as also the recurrent Nerves being bound we shal shew that the Voice doth perish, by and by in the defect of Speech.

The Vertebraes being luxated and the Bones of other Joynts, if the neighboring Nerves be there prest, a Palsie followeth; the which yet can scarce be done, because they easily give way, as also other discommodities do ensue, as in the luxations of the Vertebræ of the Neck, Impediments of Breathing and Swallowing, as we shal explain in their hurts; but in the other Vertebræ of the back, unless there be so great a luxation as doth vehemently press the spinal Marrow, there is no Palsie caused; as we see some Gibbus in whom many Vertebræ luxated do cause a crookedness of the Back, which the marrow that is within it doth follow without a compression, that they are yet no waies Palsied; unless by chance one or two Vertebræ being vehemently forced forth, making an acute Angle in the Back, do press it, the which scarce can be, by reason of the firmness of the Back.

The hurt of a Nerve is the cause of a Palsie.

A Nerve being cut off by a Wound; because then this continuation with the part is wholly taken away, the Member becomes Palsied and Insensible also, unless it receive sense from other Nerves that are yet unhurt; the which also a Contusion of it doth often cause, the Nerve being so hurt and filled with blood, that it becomes unprofitable; whence the spinal Marrow being so affected by a fall there oftentimes follows a general Palsie, but at other times the Nerves being Contused elsewhere, a particuler Resolution, oftentimes also after a Contusion, a Callus being left being left behind it, that happens as hath been said.

The cause of a particular Spasm is in the Nerves.

Also from the Nerves affected, Convulsions, or particular Crampings of the Members may be caused, not being filled with flegm (as they would have it, and have written that from the same humor sliding into the Nerves divers Diseases may be produced, and that both a Palsie and Spasm may be caused) but being irritated and molested from the same causes as hath been explained in an Epilepsie, yet not being so grievosly hurt, as to draw

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the Brain into consent, for a general Convulsion or Epilepsie would be caused, as this somtimes follows this particular Spasm, especially if the greater Nerves be affected, and the hurt be grievous: in which particular Spasm also, as in a Palsie according as more general or private Nerves are affected, as there happens a Palsie so here a Convulsion of more or fewer parts; and the parts of the Back being affected, it manifests its self here in the inordinate Motions of the Back, Arms and Hands; which doth either very much Convel and Attract these Members, in that called a true Spasm of them, or only slightly draweth the Fingers, Hands, Armes, or other Members and relaxeth them again, in a Convulsive Palpitation, therefore so called because it threatens true Convulsions. Also the Conjugations or pares of Nerves being molested, it often causeth that diseased crookedness and distorsion of the Mouth which they call a Dog-like Spasm, or also that light Species of a Spasm, which happens unvoluntarily to those that Cry and Laugh, and that from a too great affection of the Mind, the Spirits being poured forth thither with the Tears and forcing the Nerves; as how this comes to pass, and that from this cause, only more grievous Convulsions do arise, hath been explained in the causes of an Epilepsie, and Catalepsie; although these also generated from other things do produce not only that Spasm raised in the Mouth by the affections of the Mind, and ceasing by and by, as they remit, but also a lasting and dangerous one; such as that *Sardonius Laughter* was, described by *Cicero*, that killed folkes; the which also being Supervenient in a general Convulsion together with other things, is accounted for the worst sign, and oftentimes when the Paroxysm is off, it remaines stil, by reason of an Alienation of the Mind as was said in an Epilepsie: and also this Particular Convulsion presents it self not only in the forementiond hurts of Motions, but also in others, and in the Motions of Breathing and Excrements, if the Nerves destined for them, be affected; amongst which that difficulty of swallowing which the Chyrurgions cal the Stomach Spasm, and which they so much fear in wounded People, is wont to be very frequent: as these shal be explained more rightly in their proper places.

In the Muscles or their Tendons, is the cause of a Palsie, a windy Spasm and other Species of Immobility.

A Muscle, seeing it is the instrument of voluntary Motion, which moves the Member, if it be so affected, that it can no more attract the Member, then there is a resolution or Palsie or if its Disease be such, that the Member be drawn against our will, then there follows not a Convulsion of it properly called, which we have said was only caused by reason of the Nerves, but either a Convulsion improperly called, *viz.* a Flatulent Cramp, or that called by us a lasting and strong contraction of the Member, which certainly a Nerve, so final a chord, if it be compared with so heavy a Member, cannot effect, but so may a Tendon of a Muscle that is so strong. But after this manner the Muscles almost proper to every part are hurt, whence also only Particular resolutions or contractions of those parts do ensue, or of one part only, if its Particular Muscle be hurt, or of more, if one Muscle send Tendons to many parts, yet somtimes also many Muscles being affected together, also these more general hurts of the parts which they move, do follow; the which may come to pass by reason of the neerness of the Muscles, and because many being collected together, in certain places they are as it were included in one Membrane, as shall be said; which hurts, whether of one or more Muscles they depend on these causes; to wit, if they be possest with a Humor or Wind, or suffer a Preternatural Tumor, or are wasted being dried up, or suffer a cold distemper, or are hurt some other way, or have contracted an Organical fault.

A Flegmatick humor possessing the Tendons, is the cause of a Palsie.

From a Humor filling up the Muscles, or Besmearing them, or Insinuating it self into their spaces, a Palsie is seldom ingendred, as it is frequently if it possess the Nerves, as hath been said formerly. For if a Flegmatick, serous, or Excrementitious Humor flow down to the Bodies of the Muscles, or be heaped up there, then it breeds pains, and for that causeth that the Member can scearcely be moved, rather then a languishing or insensibility of it, as we shall explain in pains arising from Desluxions; the which also if Blood be there poured out of the Vessels, happens together with an Inflammation of the part; yet somtimes it comes to pass, that a watry humor, a long time washing and bedewing the Tendons of the Muscles, they being too much relaxt, and lengthend, there followes a Palsie of that part, which they ought to attract. Which for the most part happens only in those places, where many Tendons are carried in a fleshless and narrow place, about the bending of the Joynts, being bound and joyned together with Ligaments as it were with Rings, as in the Region of the Wrist and instep, where somtimes a Humor retained by reason of the narrowness of the place, and many spaces of many final bones, combined together in the Wrist and afterwrist, Ankle and Instep, and moisting and relaxing the Tendons it causeth that the Hands or Feet do continne Palsied in some all their life time: and it ceasing in other parts, only a Palsie is left in these, even when the Humor is wasted, the Tendons remaining longer then is fit; whence all their life time, they carry their Hands and Feet hanging, and when they endeavour to lift up, or lay holdon any thing because nevertheless they can move their Fingers or go, yet because they cannot do that by benefit of the Muscles, they are wont to cast them up on high, by the inpulse of the Arm or Thigh; in whom also for the most part appears an eminency as it were a certain Tumor in the superficies of the Wrist, arising by reason of Extenuation which is wont to be its companion, the bones bunching forth there, or by reason of a Callus or Node, which often grows here, for the causes afterwards to be mentioned; the which our Germans call *Contracted*, when notwithstanding they are Palsied; and that perhaps because, as hath been said formerly, with a Resolution of them caused about the Wrist, there is somtimes also joyned a Contraction of the Fingers: which comes to pass, because in the Hands laboring also of an Atrophy by reason of the compression of the Veins, which about the streits of the Wrist are prest by a Tumor, and are cooled in those bloodless parts, so that for those causes there is not sufficient passage for the Blood the Ligaments and Tendons also being wasted and dried do cause, that those Joynts of the Fingers be at length stopt, but not the Joynts by which the Hand is moved, which were already Palsied before: and thus in the same seat are found, parts Palsied, Contracted, and wasted.

From the same Flegmatick or Watry, or Excrementitious Humor, so filling up the Body of the Muscle or Tendons, that being distended and made shorter, it attracts the part into which it is inserted, it seems that a Contraction also may be caused. But when an Humor fallen down to the Muscles possesses their spaces, by which they are joyned together; a pain rather doth follow, and upon that account that difficulty of moving

ving the Member than Contraction of the part, and if it bedew the Tendons or Nerves, a Palsie rather ensues.

Wind in the spaces the Muscles is the cause of a flatulent Spasm.

After the same manner from Wind breathing in, not into the bodies of the Muscles, but those Spaces which the Muscles make being joyned together, or knit together by neighboring parts, and by its plenty distending one Muscle or more, so that being made shorter, they attract the part for a while, violently to themselves, doth that Cramp which therefore they call Flatulent, arise; as many have delivered which most strong extension of the member yet can scarce be caused from Wind only, as we shal shew that called a Flatulent Palpitation doth frequently arise from thence, unless some other cause over and above be joyned, of which we shal speak by and by in the too great attraction of the Muscles which as it happens oftentimes in divers parts of the body, so most commonly in the Toes of the Feet, the fleshy Muscles of the Calfe being then affected with the highest pain by reason of their distention, and protuberancy.

But this Flatulent Spasm is caused by plenty of Winds, the Largeness of the passages, or foresaid Spaces betwixt the Muscles especially helping, being fit for the receiving of Wind; which happens to some either by Nature, the which also are more obnoxious to this evil. Or if it falls out from a vehement motion of the Muscles, for so, being as it were pulled from one another and from the neighboring parts, the Spaces which come between them, by degrees become wider, especially if such motions be often repeated, into which afterwards Wind doth easily slide in and for a light cause, especially whenas the Muscles being very much contracted in motion, doth make way for it, as shall be said by and by; as in Hides Excoriated we easily know that such like Wind doth lie betwixt the Membranes and the Flesh by the Bubbles appearing there.

A Tumor in a Muscle or Tendon is the cause of the said contraction of the Member.

A hard preternatural Tumor growing in a Muscle as sometimes it causeth that they keep the Members attracted to it, so sometimes bound up: as a Schirrus or Node gendred from the excrements in the Muscles, and especially about the Tendons where many meet in the Region of the Joynts, as hath been said formerly of the Wrist, and I have seen somtimes come to pass in the Knee, the Foot being then so drawn upwards, that the Heel was next to the Tail. Also a Callus in a Muscle or a Tendon being left after a Wound, by which they were wounded yet not wholly cut in two, and contracting the Lips of the Wound, because then it shortens the body or tail of the Muscle, it causeth that part into which it is inserted, is more or less bound up; the which also I have seen come to pass in a hurt of the temporal Muscle, and the Mouth then was so drawn up, that it would scarce admit the most liquid meats.

An Exiccation of the Muscles on their Tendons is the cause of the Contraction of the Members.

The Muscles or their Tendons being dryed, and with them somtimes the Nerves inserted into them being so far wrinkled and bound up, they are become as it were Hardned and Callus, that they cannot be extended or bent; then in what situation they remain firm, in the same also they keep the Member which they are implanted, fixt and immoveable, and more or less Contracted; as oftimes we see by reason of Old Age or of too much and long continued labour, some parts to become Stiff and diversly crooked, and those especially which have been much and long exercised with too much working: and that they go with a Crooked Back, and cannot raise themselves up streight, who have a long while carried heavy Burdens, and that they have Crooked Fingers and Hands, who have too much used their Hesp, or that Old Folks do labour of a Tetanus, or other species of Contractions: the which may come to pass not alwaies by reason of the Joynts as shal be said afterwards, but also from the foresaid Exiccation of the Muscles, their Humor being then Wasted by the forementioned causes, so that being consumed by Leanness (the which appears manifestly in the Muscles of their Limbs, especially in the greater even outwardly) their bodies and Tendons seem to consist rather of Fibres than Flesh, and to represent dry Cords, not soft Nerves: which Driness is helpt by the defect of Fat, which is wont first of all to be wasted by the said causes, whenas it growing both Extrinsecally to their Membranes, and being Intrinsecally inbred with the Fibres of certain greater Muscles especially, anoynting them that they may the easier be extended and contracted in motion, but if they be devrived of it rendring them unfit for motion, also the Consumption of the Glue with which the Tendons upon the same account are wont to be smeared, from the same causes, for which the Humor and Fat do fail; which Exiccation we have demonstrated doth depend on an Atrophy, formerly in a pituitous humor possessing the Tendons of the Wrist: the which also may happen from a vehement Heat from without, through great Heats if either they persevere long, or are so powerful, that they burn almost, the Tendons and Muscles rather the more membranous than fleshy being then bound up from thence: But there can scarce be such an Exiccation of the Muscles from internal heat even in the most burning Feavers, seeing in Hectick Feavers, the body being otherwise almost reduced to a wasting, the members do not appear contracted by reason of that, unless by chance this happen in the Midriff and in the Tongue, the which being dried, as shal by and by be said, its Function also is weakened, as we shal speak of in the Breathing hurt: for that the Convulsions also which follow these Feavers, which we have said do very much differ from Contraction, do not proceed from the Exiccation of the Nerves as they would have it, but from their Irritation, hath been explained in an Epilepsie.

A cooling of the Muscles is the cause of Impotency of motion.

The Muscles being very much Cooled by an external cause, so that the native heat being laid asleep, their Function is weakened, then either they cannot rightly move the member, or scarcely, as it oftentimes happens in the Hands and Feet, parts more exposed to injuries by reason of the Air, Wind, Water, Cold, that then they cannot rightly lay hold on things with their Fingers, they being either numed together, or affected with a great pain, manifesting it self about the roots of the Nails, as hath been said elsewhere, but also they think that Spasm is caused by cold which is wont to betide those that swim in very cold Water, by binding up the Muscles and Tendons, the causes of which nevertheless we have expounded to be other, the which notwithstanding this may help.

The solution of Continuity in the Muscles or Tendons is the cause of a Palsie.

The Muscles or their Tendons being Cut, or only Wounded a little way transversly there follows a Languishing or Palsie of that

that Member which they ought to draw, which as it happens in divers places of the body, it doth breed many ſorts of Palſies; ſo if it come to paſs in the temporal Muſcle, the lower Jaw is Palſied.

The too much lengthening of the Tendons is the cauſe of Impotency of Motion.

Moreover the Tendons of a Muſcle being too much Extended by a violent motion, ſo that being as it were drawn aſunder they become longer than is meet, it comes to paſs that afterwards they cannot ſufficiently elevate the Member, and becauſe then they hardly recollect themſelves again, the Evil becomes laſting, which ſomtimes happens in the Hands by lifting up heavy burdens, in that ſtrong ſtreining: as alſo I have ſeen it happen in the Joynt of the Knee, being ſo forced by violence, that the many Tendons which meet there, being diſſevered by that violent and ſudden motion, and become longer, or freed from their connexion with their Ligaments, they could no more afterwards rightly bend that part, and the Patients have afterwards remained Limping.

Too great attraction of the Muſcles and their Tendons is the cauſe of a Flatulent Spaſm.

And alſo an Attraction with violence oftentimes befals the Muſcles and their Tendons, that they being too much bound up, beyond their term, or otherwiſe diſtorted or bowed, or ſomwhat declining from their natural ſituation, ſo that they cannot be relaxt again preſently, they draw the Member beyond a mean figure, and that Spaſm is cauſed which ſo often ſeazeth on men for a time, when they extend their Members violently or with an inordinate motion: as it more commonly happens in the Feet when they put on their Shoes with pain, or Swimming in the Water, they ſtir them after an unuſual manner, in which Spaſm a Prominency of the Muſcle appearing, and vehement pain, doth ſufficiently ſhew that it is wound up by contraction, and too much ſtreightened in it ſelf, Wind then alſo breaking into that Space, which it cauſeth by its elevation, as hath been ſaid formerly, and helping its diſtenſion; and that ſo long til the Muſcle being relaxt again, the Spaſm doth ceaſe again: which is the ſooner performed by the oppoſite Muſcle drawing the part which the Muſcle faſtened to it doth follow; the which nevertheleſs, if the part be diſpoſed as hath been ſaid formerly in Wind, and there is plenty of Wind, it is wont ſooner and the eaſier to return, and ſomtimes to moleſt men not only in ſome one place, but in many places; which every one, if he rightly conſider the buſineſs, may know to be the true cauſe of the Cramp that doth ſo violently and with pain extend the members: ſeeing the true Spaſm which is cauſed by reaſon of the Nerves ſometimes in theſe or other parts, cannot extend the members ſo violently, or cauſe ſo great pain, as when it ariſeth by reaſon of the Muſcles.

An Organical fault of the Muſcle is the cauſe of the Impotency of motion.

But alſo if this Organical Diſeaſe from inbred cauſes befall the Muſcles or their Tendons from the Birth, that in more or fewer places, they are longer or ſhorter, there follows either a Languiſhing, or Aſtriction of thoſe Members: as we have ſeen ſome Born with a Rigid or Bowed back, or contracted in other parts, or alſo palſied.

The parts which are moved in voluntary motions, are the external Members ſtrengthened with Bones, which do perform ſtrong motions, as hath been ſaid; in which if the cauſe of immobility conſiſt, it is for the moſt part in their Bones or Ligaments and Cartilages, and the parts of the Face that exeteiſe the weaker motions, as the Lips, Eyelids, the Eye; whoſe faults which are prjudicial to their motions, now we wil explain in particular.

The Cauſe of Impotency of motion in the Bones.

If the Bones be ſo affected, that they cannot be moved out of their place, then neither can the part which is compoſed of them and ſtrengthened by them, follow; which comes to paſs from an eminent hurt of them, they being broken or cut off, or Contuſed, or otherwiſe preſt by ſome weight; or if they be diſlocated in the Joynts, in which they are joyned together for the exerciſing of motion.

A Fracture of a bone is the cauſe of Impotency of motion or ſome other hurt of them.

The Bones then of the moveable parts being broken or cut off, or contuſed, or preſt (for concerning other hurts of them we ſhall treat elſwhere) it comes to paſs, that firſt of all if they be broken and wholly broke off, then though part of the broken Bone, into which the Muſcles and Tendons are implanted, be attracted (the which cannot be, by reaſon of the pain which is preſent, and is encreaſed by the leaſt motion of it) ſeeing the part broken off doth not follow, the part can no waies be rightly moved: the which ſooneſt comes to paſs in the long and round bones of the parts which are moved, the which are the eaſier broken, if they conſiſt only of one bone, and then if the Fracture be ſo great, that the ends of the bones broken off do part from one another, that portion of the Bone which grows to the Tendons, which are alwaies retcht, being drawn upwards, ſeeing nothing doth reſiſt, there follows an abbreviation of the part, as it often comes to paſs in the Bones of the Thigh, Arm, and Fingers, but in thoſe parts which are ſtrengthened with two Bones, that this may come to paſs, they muſt both be broken and diſſevered after this manner, whenas if one only be broke, the other doth yet ſuſtain the part, and therefore there follows no ſhortneſs of it, neither would the motion of it then be taken away, unleſs pain did hinder it; as in the two Bones of the Leg and Elbow this ſomtimes happens: and in the diſtinct broad Bones of the lower Jaw, it may fall out on both ſides, or only on one ſide: but if the part be compounded of many long Bones, as in the Inſtep and Afterwriſt, ſeeing all of them are ſcarce broken together, pain (as long as it laſts) rather than an Organical fault, wil then hinder the motion: alſo if ſhort and thick bones be broken, then alſo by reaſon of pain, the motion is ſo long hindred; as when the Vertebræ of the Back have been broke off, as I have once obſerved it, ſeeing the bodies of them can ſcarce be throughly broken, as neither no other ſmall Bones. Yet the Ankle being broken (which I have ſeen by chance wholly pul'd in two in the middle) the motion alſo is taken away of it ſelf, and not only by reaſon of the pain: and if this come to paſs in the Knee-bone, which in ſome I have oftentimes noted to be broken into two parts very much ſeparated and diſtant, then ſeeing the Knee doth no way conſtitute the Joynt, but becauſe the Knee-pan only doth retain the wandring Tendons, that they turn not aſide, the motion of the Joynt ſuffers an Imperfection.

All which forementioned Bones both long and ſhort cut aſunder in like manner by a Wound do produce the like Impotency in Motion for the ſame reaſon.

As from a Contuſion of them, as long as the Pain moleſts, the motion is hindred by reaſon of that rather

than any thing else, unless there be a Fracture, the which is wont sometimes to happen in the Vertebræ of the Back, and in the lesser bones of the Wrist and other final ones of the Feet.

All which, as well Fractures, as Wounds and Contusions, do befal them from a violent cause comming from without, as from a blow or fall: also from corruption of the Bones, by a Sphacel, not only of the lesser, but also of the greater. We have seen some parts of them so eaten and corrupted, that the bones have fallen, as if they were broken, and have been rendred unfit for Motion, and that both by reason of the French Pox, and other causes; as also we have observed from the Cancer of the Gums, that part of the lower Jaw together with the Teeth, hath been taken out on one side, and the Maiden which suffered this, could nevertheless chew her Meat.

And also the bones being burthened by a weight, Flesh, or Fat, they follow more slowly to move.

A Dislocation of the Bones of the joynts, is the cause of Immobility.

Two Bones being Dislocated which mutually joyned and bound together with Ligaments, do form a Joynt for Motion: if this happen in the Joynts which are moved by an apparent Motion by a Diarthrosis, then this Immobility will be more manifest, and more prejudicial, especially if the Luxation be great; which comes to pass, if the Head of the Bone do wholly fal, forth of its socket, and then they call it an Exarthrema for if it be only carried to the Brow of it, then the Luxtion is lighter, and tis called a Parathrema, which some call only a Separation, both which if they happen in the joynts, joyned by an Enarthrosis as of the Thigh with the Hip, and the Head falling out of its receiver and thrust to the upper parts do stop there, retained by a Lax Ligment, the Thigh also is shorted, and there is an apparent prominency in that part; the which also happens if it be carried to the hinder or utter parts: for if it be led to the inner or fore parts, because it subsists about the brows then the Foot rather becomes longer. And if this come to pass in the Joynt of the Arme with the Shoulder, as it may the sooner be by reason of its plain socket, the Arm for the most part fals down to the lower parts under the Shoulder, and then the eminency of the top of the Shoulder is lost, and in the place of it a hollowness doth manifest it self: and if the Jaw be Luxated after this manner, it makes that mouth open, fixt, and crooked, if the Luxation be only in one side: the same may happen in the Joynts, composed by a *Ginglymus*, their Heads and Sockets going a part, to to this or that side, as in the Leg with the Thigh and Feet, in the Luxations of the Elbow with the Shoulder and lower part, and of the Joynts of the bones of the Fingers, for which reason also the Knee-bone if it fall out of its Socket, it doth prejudice Motion by diverting the Tendons, as hath been said in the Fracture of it, and upon no other account. But in the Trochoidal species of Articulation, by which the Head is moved upon the Vertebræ, seeing that hinge, which the first Vertebræ makes with the second, can scarce be lift up so high, that it should fal out of its Socket, & tis so firmly bound up with Ligaments it can scarce come to pass, that the Head should loose its Motion, by reason of a Luxation. But if a Luxation happen in the Joynts which are moved by an obscure Motion, by a *Synarthrosis*, and this be in that Species, which we have called the moveable Joyning, or Coalescency, by which the Vertebræ of the Back are joyned together, then the Cartilage which doth also Conglutinate the Verbebræ together being relaxt, it slacking somwhat in many Spaces of them, espacially about the middle part of the Back, and the upper part of the loins, seeing it is found there more plentiful, it comes to pass, that many Vertebræ (because one alone can scearce be carried so outwardly, and the Cartilage with which it is knitted be so Relaxt) more or less parting from one another, do produce a crookedness in the Back, and when it cannot erect it self, also a shortness of it, and with that of the whol Body, in those called *Gibbous*, and then the Prominency arising from thence bunches forth to the outer parts, rather then to the inner, because the bones of the Vertebræ do not suffer them to be so wrested thither, and according to the various manner of severing the Vertebræ it causeth somtimes an Acute, somtimes an Obtuse bunch, and greater or less. Somtimes the Vertebræ bowed towards the sides, do fram the Body wreathed and short after another manner: and in all those crookednesses of the Back, because the Ribs annext to the Back do follow, the breast also appears either lift up or depress, or otherwise deformed; whence follows difficulty of breathing if the structure of the Breast be very much vitiated; or also danger of Suffocation if the Vertebræ of the Neck be Luxated, the which notwithstanding cannot be unless by great violence, because there intercedes a little Cartilage, but as somtimes the first Vertebra which is loosely joyned by an Arthrody, if it be Luxated, it causeth the sixth species of a quinsie so called by *Hippocrates*.

But in the other Structures of final bones mutually joyned, as of the bones of the Wrist, Foot, Instep, this seldom comes to pass, because they are strongly bound together; and if it do happen, because all of them are moved very obscurely, they cannot bring any great impediment in Motion.

But this great perversion of the natural Scituation of the Joynts, that the joynts looseth its moveableness, and that hinge, as is said cannot be turned, proceeds from divers causes; somtimes from a violence offered to the bones and deviding these Conjuctions of the bones, as if either bone which frames the joynt, be forced or thrust by a blow, or fal from its Conjunction with the other, which as we see in many joynts, so in that of the Shoulder, otherwise naturally prominent there, it easely and often happens by a fall; the same also may come to pass from the Attraction of a bone made beyond measure, or to a place, whether it ought in no wise to be drawn, as in Yawning the mouth being too much or crookedly distended, a Luxation of the Jaw, or a Contorsion of other bones by Gestures or seriously by a rack. But also this happens by degrees, if a moveable part be often inclined to the same part, and be kept a long while in that Scituation, whence at length by continuall use the joynts being relaxt, they are drawn asunder, and because they cannot be reduced to their natural Scituation, they cause an Immobility of the Member, whose Figure, also they corrupt, for which reason a bunch is wont to grow in the Vertebra of the Back of Maides. because by custom they sit crooked a spinning, and of Infants, because they lie in an uncomly posture of Body; by which means also they increase the beginning of the crookedness of the Back, whether caused from the birth or by chance by inclining themselves that way, both in their going and lying down, and not resisting by a contrary Motion. A Luxation also may happen of its own accord, not by the fault of a bone, but of the Ligaments as we shall now explain.

In the Ligaments of the Bones of the joynts, is the cause of the Impotency of Motion.

By reason of the Ligaments that do incloſe and retain the Joynt, the Joynt may be Luxated, and so its Motion may cease, or otherwise it may be stopt and hindred without a Luxation.

By

The Continuity of the Ligaments dissolved, is the cause of Immobility.

By reason of the continuity of the Ligaments dissolved, which ought to retain both bones in the Joynt, that they should not be dislocated, a Luxation of them also, or at least wise an Elongation of the Member, so called by some, may be caused, the which yet can scarce happen from the breaking of them, seeing these are most strong bound, unless this befal the round Ligament, which knits the Head of the Thigh to the receiver, being broken off from the bones by violence. But the same may come to pass from a wound penetrating to the Membranous Ligaments which do outwardly compass the joynt, and cutting them in two, but this seldom comes to pass, because these lie in hidden places. The Ligaments also may be eaten through by matter Suppuration being made there, the which is wont sometimes to fal out in the joynt of the Thigh with the Hip by reason of Sinuous Ulcers, which arising there about the Membranous parts, do continually pour forth a white Viscous matter, by the Buttocks and Hip, and Intrinsecally corrupt these Ligaments: of which sort we have seen many so affected, with a Luxated and shortend Thigh to have remained perpetually lame, or at least-wise that not being Luxated, to have limped with one Foot longer then was meet. Somtimes also the Ligaments that compass the joynts, being too much drawn asunder and as it were torne in part from the bones, to which they grow, by some violent forcing of the joynt on the rack, or by some chance, the Motion of the Joynt is left somwhat hindred, with a pain at first, oftentimes a long while troublesome: as I have somtimes observed, hath happend in the joynt of the Knee, and Shoulder and in others; and *Casparus Wolphius*, an eminent Physitian, my true friend, hath told me, that by violent drawing on of Bootes, when they were put on, his Hip joynt hath been thus hurt.

A slackness of the Ligaments, is the cause of the impotency of Motion.

But also by reason of a slackness of these Ligaments, as in the joynts which are moved by a manifest Motion, this naturally befals them, that they are more Lax, neither do they hinder the joynt, which ought to be moved freely, by strict binding it, it comes to pass that these joynts are more easily dislocated then others, so also if these which are more Lax then others, and others also if they be broad, be yet more amplified, and those which are round, be lengthned, then the Member stands forth, further then is meet, and gives a helping cause, that a Luxation be the easier made, and from a less force. Which things befal some from their birth, whence they can both bend and extend their limbs, somwhat beyond their natural bounds; or they have one limb longer then another, or as some would have it, they presently grow with dislocated Members; or it happens by reason of the Age, because of the softness of the Ligaments, and appendixes of the Bones, that from the joynt which remain for some time Cartilaginous; and most have thought that might come to pass from a watry, Flegmatick, Serous humors so bedewing these parts, the which yet is not very likely, as appers from hence, because in the *Leucophlegmatia* and other Species of the Gout, the Humor staying there a long time, yet there follows no Luxation of the part.

A drinesi of the Ligaments, is the cause of the impotency of Motion.

The Ligaments also being dried, and hardend, and being bound up and Callous, or hindred with knobs in the Gout, or with Nodes, the Motion of those joynts remains fixt and immoveable, or otherwise they are hardly moved, and somtimes they make a noise and crackling, as if they were broken, if they be urged with greater force. The cause of which sound also is, if it be driven by force further then the joynt ought to be moved by a moderate Motion; but such an Exication of the Ligaments, somtimes proceeds from old age, and a most acute feaver drying up also the Bones and Nails, as hath been said elsewhere: or from some other hurt, whence a Callus or Node grows there, or from a Humor turned into a knob about the joynts, as shall be explained in its place.

In the Cartilages of the Bones of the joynts, is the cause of immobility.

The Cartilage, which crusts over the Heads of the moveable bones, if it loose its slipperiness, and clamminess, and be dried up, or Exasperated from the said causes, it doth also hinder Motion, as a hinge tainted with rust.

In the Lips, is the cause of their immobility.

By Reason of an affect of the Lips opening the Mouth it happens, that their Motion is weakend, and the largeness of the Mouth depraved; if they be so cut off, or dissected, that they cannot follow Motion, or otherwise, as we have seen it fall out in the French Pox, if they be eaten with Ulcers and corrupted: but their other faults do prejudice rather by pain, as we shall shew in their places.

In the Ey-lids, is the cause of their immobility.

It scarce happens that by fault of the Ey-lide the Eye cannot be shut, unless a Tumor or some excrescence growing there do hinder it; but it fals out that the Eye cannot be opend, only the upper Ey-lide being cut in two, and scarce for any other causes.

By Reason of a Disease of the Eye, its Motion scarce fails, unless this proceed from a Tumor of it, that it cannot be rowled about freely, pain then chiefly hindring the Motion; but a squinting though it be from the Birth, doth rather arise by reason of the Muscles of the Eye, as hath been said, and if this comes to pass, the Eye being wounded or digd out, the Eye doth not only loose it Motion, but also becomes unprofitable.

The Cure.

The Cure of all these kinds of Immobility, whether it be a general Palsie of many parts, or proper to particular moveable parts, or a Spasm, or Contraction, or Bunch, Luxation, Fracture, Wound, or other hurt, is ordered according to the Nature of the cause; which we have said, was a humor possessing the Nerves or the Tendons of the Muscles, a cold distemper of the Muscles and Nerves, a distension of the Muscles from Wind; a drines or emptines of the Muscles, Tendons, Ligaments; a hard Tumor in the Tendons Ligaments; the compression of a Nerve, a Wound or Contusion in a Nerve, Muscle or its Tendon, Ligament, or Member; a Fracture of the bones, a Luxation of the joynts, and last of all an Organical fault in all the Instruments serving for motion, in every one of which what must be foretold, or done, we will now propound.

The Cure of a Palsie ingendred by Flegm, which they apply also to a particular Spasm which they say proceeds from the same Humor.

If a Palsie be from Watry, Excrementitious, or Flegmatick, or serous humors, simple or mixt together, Bedewing or pressing the Nerves, or cooling them, whether it be general to many parts, or only particular to some, the following way of Cure must

be

be ordered; the which alſo they think likewiſe convenient, and preſcribe it for the Cure of a Convulſion or particular Spaſm or Cramp, which they have thought was cauſed from the ſame Humor: but we who do hold the ſame to be the Cauſes of particular Convulſions which we ſaid were of a General Convulſion; as concerning general Remedies, we think the ſame alſo which have been explained in an Epilepſie, are rather to be uſed. But the Topick which are deſcribed here to be convenient in a Flegmatick Palſie applied to the place affected in a Spaſm we judg may do good, if ſo be that a Convulſion cauſed from thence or Pain do urge it, ſubſcribing to common conſent of Phyſitians, yet the Attraction which is in the Spaſm of the Members for the moſt part doth not ſo much require Topick Remdies, as the danger of an Epilepſie by and by to follow, doth admoniſh us to apply the uſe of thoſe things which do prevent it, as both thoſe things which are Intrinſecally taken and Extrinſecally applied upon that account, have been explained: as alſo if a Flegmatick Humor falling down upon the Muſcles, doth breed theſe diſtenſions with Pain, the Cure ſhal be explained in Defluxions.

A Prediction in a flegmatick Palſie.

In a Flegmatick Palſie therefore, as they call it, whether general to both ſides, or only in one ſide, whether this follow an Apolepſie, or begin of it ſelf, becauſe it is a Cronical Diſeaſe, and the ſick do ſcarce continue ſo long in the uſe of Medicines, and good government, the Cure goes on very hardly, eſpecially if it it befall Old Folks or otherwiſe thoſe whoſe Strength is exhauſted: or if it ceaſe in ſome places, it ſometimes leaves a laſting fault, in the Speech or Hands or elſwhere: nor doth a particular Palſie leſs require a long Cure, which alſo ſometimes ends in a General one, whoſe foreteller it often is. Somtimes alſo a Palſie is Dangerous becauſe it threatens an Apoplexy, in which unleſs it be cured, it is wont often to terminate and kil the Patient: yet in the Interim if we proceed rightly in the Cure of a Palſie and deſiſt not in a Diſeaſe of long continuance, and the ſick be obedient, and nothing more grievous doth hinder, that ſomtimes ſucceeds happily or from a more General one, the humor not ſubſiſting about the Original, but in the proceſs it is changed into a Particular one.

The Method of Curing in a flegmatick Palſie.

Which Cure we wil ſo order, that in relation to the Cauſe, we wil revell another way from them, derive, or purge out of the body the humor that poſſeſſes the Nerves, or otherwiſe diſcuſs or conſume it in the part, and prevent that new Excrements be not generated, from which theſe humors are either increaſed or fomenced, but in Reſpect to the Diſeaſe we muſt correct the Cold and Moiſt diſtemper in the Nerves. Laſt of all by occaſion of the Symptoms we muſt ſtrengthen the weak parts, and allure the Spirits again and Vertue to the Muſcles, and muſt provide for the ſtrength of the whol body.

Which ought to be done in this order, firſt of all we turn our ſelves to thoſe things which purge by the Stool, and before we uſe the Stronger we wash out the common Excrements of the Guts and their dregs, by things taken and Injected, for ſo this filth being firſt caſt off, the ſtrength of Purgers being not broken by them, doth the better diſperſe it ſelf, afterwards we muſt prepare the Flegmatick Humor with hot inciſive things that are appropriate; which being done, we muſt adminiſter Purges which do egregiouſly ſolicite nature, for the calling forth of humors from the depth, and for the caſting of them forth by this natural way deſtin'd for the purging of Excrements, and ſo may revell them from the part affected; all which if they help not preſently in this Diſeaſe of long continuance, they muſt be often repeated, that we may continually accuſtome nature, that ſhe rather empty her ſelf that way; we muſt alſo attempt evacuations by other parts, yet that which is made by ſtool going firſt: as by the Mouth and Noſtrils, which are done, either to prevent a new Colection of Excrements, which ſeeing they are wont to be heaped up in the firſt concoction not rightly performed, Vomiting upon that account muſt be cauſed both by things taken and actually, or chiefly, that excrements of the Brain, which the brain is wont naturally to expel by theſe paſſages, may be allured hither, and ſo may be diverted, that they follow not the courſe of the Nerves. Which is done by putting things into the Mouth and Noſtrils; alſo we draw forth the humors through the habit of the body by inſenſible tranſpiration, manifeſt Sweats, by giving thoſe things which can move them, or by outwardly applying them, or by motions of the body; or we aſſay it with manifeſt openings; alſo we heat and ſtrengthen the parts, giving and applying divers Remedies, which by drying may waſt the humor; in the interim, we muſt preſerve the Strength both by Nouriſhments taken, and other things rightly adminiſtred, by which the body is preſerved.

But theſe things which are adminiſtred both by reaſon of the Cauſe, the Diſeaſe and Accidents, we do perform, either by things taken or ſwollowed into the ſtomach, or by thing thruſts up into the Guts, or into the capacity of the Mouth and Noſtrils; or by things outwardly applied to the body, the palſied Members, the Back-bone, the Head or by encompaſſing Air, or Motions of the Body and Mind, or by manifeſt Openings, of which we wil treat in this order.

The Remedies which we give to the Sick to be taken and ſwallowed, although oftentimes they perform many things together, yet they are chiefly given to cauſe Expurgations by the ſtool, by Vomit, by Sweats, or other waies; or they are given for Nouriſhment for Strength ſake, with which alſo we mix things Medicinal; or for the preparation of the Humors before Purging, or to Heat and Strengthen the Nerves.

The Remedies given to purge the Humors and Excrements by Stool, which with the ſame labour ſometimes alſo do alter too, are ſome of them Gentler which are uſed before other Purgers and their Preparations; and are uſed by courſe, to keep the belly open, which by long lying and ſluggiſhneſs is wont eaſily to be bound, & they are chiefly given in the form of Pills. Of uſual Pils Aſſaireth are convenient, becauſe they have French Lavender in them, Alephanginæ, becauſe thep contain many Spices, which adding of Agarick wil be more effectual, and whiles the matter flows Rhubarb may be added, Maſtich, and Caſtor that they may heat more powerfully.

After this manner. Take *of Pills Aſſaireth two drams, Alpehangine one dram and an half, Agarick, Rhubarb, each one dram; Maſtich half a dram, Salt gem one ſcruple, Caſtor half a ſcruple,* with ſyrup of *French Lavender* make a *Maſs*, let him take *one ſcruple* for a Doſe by courſe.

Or they are prepared of other things. Take *of Turpentine half an ounce*, let him take it by it ſelf or diluted with *Honey* and *water of Groundpine*; and 'tis an appropriate *purging* and ſingular Remedy for the Palſie, to which ſome add the *Species of Hiera*, and give it often.

Of

Of convenient Liquids taken after the ſame manner, alſo a Minoration, as they cal it, or gentle purge, may be made.

Then ſtronger purgers muſt be given, yet ſcarce before the fourteenth day, after the invaſion of the Diſeaſe, which times is to be ſpent in the preparation of the Humors, leaſt that as it often comes to paſs in Diſeaſes from Defluxions, whiles it yet flows, it be ſtirred more by the uſe of theſe things, eſpecially if Gums which diffuſe the matter, do enter into theſe compoſitions, as it often happens in Pils, which are therefore to be omitted, if we muſt purge ſooner, and certain aſtringent things are rather to be mixt.

The moſt convenient form of Pills, will be this. Take *of Pills, Fætidæ, Cochiæ, of each one ſcruple; Opopanax half a ſcruple, with ſyrup of French Lavender*, Make Pills. If they work not enough they may be quickend with *five grains of Trochiſks of Albandal.*

One dram of Pills of Ground-pine given, will do the ſame with great ſucceſs: of which afterwards.

Such a Potion may be taken inſtead of the Pills. Take *of the Electuary, Diaphœnicon, the greater Indum, of each two drams; ſyrup of Diacnicum ſix drams, Cinnamon water two drams, Ground-pine water*, as much as is ſufficient; make a Potion.

Or, Take *of the tables of Diacarthamum of thy deſcription one dram and an half, Lozenges of Citron ſolutive two drams*: Diſſolve them with Sage water, for one draught.

A Decoction may be made inſtead of theſe. Take *of the ſeeds of wild Saffron, the leaves of Senna, of each three drams, Hermodactils one dram, Liquoriſh root half an ounce, Raiſons forty, Figs twenty, Annis ſeed two drams, Roſemary flowers one pugil*: Make a Decoction. Infuſe in it, *of Agarick trochiſcate one dram and an half, Turbith one dram, Ginger half a dram, Cinnamon one dram*: Strain it, Diſſolve in it *Honey of Roſes laxative half an ounce*: Make a Potion.

The Purgers muſt be repeated by courſe, if the Diſeaſe continue, eſpecially if there be great plenty of the Humor flowed down, as in a more general Palſie, and the Body be full, which ſhall be done, the Humor being prepared a new, and purged again, or giving for ſome time, things made of thoſe following, for three dâies together, then interpoſing a day or two and reſting the while, or every Month, or at the ſeaſons of Spring and Autum.

The form of Pills is moſt convenient to receive any thing, and eſpecially thoſe Pills of Ground-pine, or *Ivæ* ſo called, are commended, which *Mathiolus* holds for a preſent remedy, and *Bened. Victor* cals a glorious help: if one ſcruple be taken before ſleep at night, every day, or at leaſt twice a week, the deſcription of which produced by them both in the ſame manner, we make thus more commodious: Take *of Coloquintida prepared half a dram, Scammony prepared one dram, Turbith one dram and an half, Agarick two drams, Rhubarb one dram and an half, the Pouder of ſimple Hiera half an ounce, Ginger one ſcruple, Spicknard, Foſſil Sals, of each half a ſcruple; Lavender, French Lavender flowers, of each one dram; Opopanax half a dram, Maſtick one ſcruple, Caſtor half a ſcruple, the Diſtilled Oyl of Marjoram and Roſemary, of each five grains; the juyces of Ground-pine newly drawn, and boyled like to an extract*, as much as is ſufficient; Make a Maſs.

A uſual Syrup ſhall be prepared thus, with leſs labor and coſt; Take *of the roots of the true Acorus half a pound, dry Sage one ounce, Ground-pine, ſix drams, flowers of French Lavender and Lavender, of each half an ounce; Caraway ſeed two drams*, Make a Decoction, and in that ſtrained infuſe, *Agarick one ounce and an half, the leaves of Senna four ounces*: Let them boyl gently, Aromatize it with *Cinnamon two drams, Ginger one dram*, add *of Honey a ſufficient quantity*: Make a Syrup, boyled to a conſiſtence for your uſe, making trial of at the firſt, giving of an ounce and an half.

Or one very much compounded, ſhall be made thus, Take *of the roots of the true Acorus, Orrice, of each one ounce, the roots of Angelica or Maſter-wort, Elecampane, Pellitory of Spain, Hog Fennel, round Birth-wort, of each half an ounce; Galengal, Cyperus, Valerian, Dyers Madder, of each two drams; the Herbs Sage, Marjoram, Betony, Balm, Penny-royal, Poley, Hyſſop, Time, wild Time, of each one handful; Ground-pine one handful and an half, flowers of French Lavender, Lavender, Roſe-mary, Prim-roſe, of each one pugil; ſeeds of Caraways, Fennel, mountain Hartwart, Piony, of each two drams; Rocket, Rue, Coaſt Tree, Angelica, of each one dram; Bay and Jumper-berries, of each half an ounce; Liquoriſh root one ounce, Figs twenty four, Raiſons forty, wild Saffron ſeed two ounces, leaves of Senna three ounces Turbith half an ounce, Agarick ſix drams, Hermodactils three drams, the roots of Graſs Plantane two drams, Mechoacan three drams*: Make a Decoction according to Art, Aromatize that ſtrained, with *Cinnamon half an ounce, Ginger one dram and an half, Salt Gem half a dram*; add *of Sugar half a pound*: Boyl them to the conſiſtance of a Syrup, Let him take for one Doſe *two ounces*, or more.

An uſual Electuary wil do the ſame: Take *of the Electuary, Diaphœnicon the greater, Indum, tables of Citron ſolutive, of each one ounce; tables of Diacarthamum of thy Deſcription ſix drams, the Pouder of Hiera of Coloquintida three drams, Maſtick, Opopanax, Sagapen, of each half a dram; Nutmeg, Ginger, Cinnamon, Cloves, of each one dram; with ſyrup of Ground-pine or French Lavender*: Make an Electuary, let him take from two drams to four.

Some alſo attempt Purgations by Vomit, giving the very ſtrongeſt, as Stibium, by the uſe of which I have indeed obſerved twice or thrice, that they have become preſently Palſied, who formerly were not ſo; therefore it ought to be moved rather by giving the gentler, (unleſs it ſucceed of its own accord, or be actually provoked) in thoſe that are ſooner accuſtomed.

By ſweats often repeated, by giving of the Decoction of Guaicum, China, or others, becauſe it cannot be removed by any other way, this long continued Diſeaſe is often cured; which will be made proper, if Sage and Ground-pine be boyled in the ſame, and it be Aromatized with Galangal and Nutmeg, as thus: Take *of Sarſaparilla two ounces, Guaicum three ounces, Orrice root one ounce, roots of Elecampane half an ounce, Roots of Acorus half an ounce*: Make a Decoction in Water, according to Art, for a ſweating and ordinary drink.

But alſo it will be very convenient to move ſweat, ſomtimes by giving of other things, as the *Rob or Quiddeny of Dwarf-Elder two drams*: Diſſolve it with the water of Ground-pine and Sage, and let him drink it.

The Courſes, Hemmorrhoids, if they be ſtopt, are profitably moved, by taking of remedies that provoke them.

Thoſe things which are graunted them to be neceſſarily taken for the nouriſhment and ſuſtinance of the Body ought to be adminiſtred ſparingly and ſeldom; for to uſe a ſparing Dyet, and ſomtimes to ſuffer hunger, doth very much hinder the product of Humors; which will be done, if they take meat moderately only twice a day, or ſomtimes forbare their Supper. Or their Sweats being continued for ſome time, and other Evacuations, in making of their Dyet, as they call it, they

joyn a Detraction of their meat, or if otherwise, meat be administred to them sparingly.

The which also if it be of good juyce it will be sufficient, and produce fewer Excrements, as if he eat Egs, and of Birds, Threshes, Mearles, Larks, Chaffinches, birds like Nightingales, Sparows, or those which most do write, do by a peculiar vertue resist this Disease, as chiefly wild Pidgeons, Turtles, Swallows, the brain of a Hare, which therefore they put also into Compositions: which are convenient rosted rather then boyled, and moreover they become Medicinal, if they be stuck and stuft, with Sage, Marjoram, Time, wilde Time, and other sweet things, and Spices, especially with Nutmeg.

If the seeds of Carawaies, or Fennel, or Annis, or Gith, be mixt with the bread when it is baked it will be more convenient, and if he somtimes use Aromatical Dyet or ginger bread, Sugar'd, as they are wont neatly to prepare it, or honied, which they call the Bread of Life, Pine-nuts, Pistachoes, are very much commended here, and are beleeved to strengthen the Nerves.

Junkets of Mustard seed administered at table instead or sauce are very much approved, as also pickeld Capers.

The Salt with which meats are salted is approved, and that made of Treacle and Vipers, as this following: Take *of Salt one ounce and an half, Nutmegs one dram, the roots of Pellitory of Spain half a dram, the leaves of Sage, Marjoram, of each one scruple:* Mix them.

It will do good if they drink but little, and wholly abstain from the use of Wine, or of clear Wine, and instead of that, drink Water and Honey, which shall be prepared of ten parts of Water, and one of Honey, boyled to the Consumption of a third part, and Aromatized in the end: Or if he drink it more Compounded, as shall be declared by and by.

Those things which are given to prepare the Humors are used before purging Medicines in the beginning of the Disease, and are repeated, when in the progress of the Disease, the purging ought to be reiterated; but also otherwise given they do help, because they at once waste and alter the Humors, as shall be said.

This is done by Syrups after this manner: Take *of the Syrups of French Lavender, Hyssop, of each two ounces; Honey of Rosemary flowers half an ounce, the waters of Sage, Ground-pine, Hyssop, of each one ounce and an half:* Make a Julep, Aromatize it with the Pouder of *Rosata Novella*, for four or five times.

Also *Nicolaus* his Syrups of Ground-pine, are convenient, of the Conserve of Acorus Honey of Squils, although they approve of Oxymels, we omit them, the waters of Marjoram, Betony, Prim-rose, Balm, are allowed.

In place of these, Water and Honey, boyled with Acorus, French Lavender, Lavender flowers, or with Sage, is very convenient.

Also the following Decoction may be given to drink instead of these. Take *of the roots of the true Acorus, Orrice, of each six drams; Cyperus, Elecampane, of each three drams; the Herbs, Sage, Marjoram, Ground-pine, the tops of Time, of each one handful; Hyssop, Betony, Penny-royal, Calamint, of each half a handful; the flowers of Rose-mary, French Lavender, or Lavender, Elder, Prim-roses, of each one pugil; seeds of Annis, Fennel, of each two drams; Rue one dram, Liquoriss root one ounce, Raisons three ounces:* Make a Decoction, adding Honey or Sugar, as much as is sufficient, Aromatize it with Cinnamon, or with some Aromatical Pouder, let her use it instead of a Julep.

The Remedies which are given to Drink, to heat the sluggish and cold Nerves, and also to waste the Humors ought to heat very much, so that they may kindle a feaver, because if that supervene, the whol Body then grows hot, and the moistures of it are Egregiously consumed: with which also are mixed those things which are appropriate to the Neres and do resist Disease by a peculiar vertue.

But these are used presently after purging, and in the whol progress of the Disease, being given in the morning to them fasting, or once or twice towards night, in the form either of a Decoction, Infusion, Waters, Pouders, Electuaries, Pills, the choycest of all which we will propound.

Somtimes the more grateful Decoctions are given upon that account, because they loath ingrateful things in that form: of which sort Compound Hydromel or Mead is very effectual, if it be drank somtimes before Meat, or otherwise, which is thus made: Take *of Water twenty pound, Honey one pound and an half, the roots of Acorus, dried Sage, of each one ounce; the roots of Orrice half an ounce:* Boyl them to the Consumption of a third part, Aromatize it in the end with *Cinnamon, Nut-meg, of each two drams; Pepper half a dram:* Make a Melicrate, the which also may be done after the same manner with Sugar.

Other Medicinal Decoctions may be reduced into the form of a Syrup and used, which may be boyled, as hath been said there, with the formentioned preparatives and purgers, or taking away those things which purge and so be given.

Or of juyces after this manner: Take *of the juyces of Sage, and Ground-pine, of each one ounce and an half; the juyce of Marjoram one ounce, Lavender water two ounces, the most generous Wine two ounces, Sugar or Honey two ounces:* Boyl them to the consistence of a Syrup, Aromatize it with *Nut-meg, and the roos of Galangal, of each one dram:* Let him take often one spoonful.

Infusions, especially those made in Wine do good, for though Wine, especially if it be stronge, is no waies convenient, yet acquiring the strength of other things to it self, and being to them as it were a Vehicle to the Nerves, it becomes profitable, being somtimes taken by way of Medicine, but it is prepared of the simple Infusion of Sage, or of some convenient Plant.

Or a Compound one, as followeth: Take *of the roots of Acorus two ounces, the leaves of dried Sage one ounce and an half, Ground-pine, Cow-slips, of each one ounce; Wormwood half an ounce, Nutmeg one ounce, Zedoary half an ounce, white Wine, or new Wine, or Wine a little boyled twenty pound:* If you add of the *shavings of Guajcum one pound, the wine will be more effectual.* Distilled waters or those made by infusion, are highly magnified by some, which are given by themselves in the morning, or are mixt with others, as the more simple ones of Rosemary, Sage, Marjoram, Time, Lavender, especially, if the Liquor be extracted out of them dry, being first steeped in Wine; Cinnamon water, as it is grateful, so also tis effectual, the water of Ground-pine and Prim-roses are chiefly appropriate.

Many Compound ones are made for these uses, such as we have described also in an Apoplexy, this also will be rightly fitted for the work. Take *of the roots of the true Acorus, Angelica or Masterwort, Elecampane, of each six drams; the leaves of Sage, Marjoram, Rose-mary, Ground-pine, Rue, the flowers of Lavender, Prim-roses, of each half an ounce; Galangal, Nutmeg, Zedoary, Cinnamon, Cloves, of each three ounces:* Being thus pouderd steep them in strong-wine, or in that first distilled, till it be thick as Frumenty, afterwards draw forth the Liquor, give one spoonful often in the morning; it will

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be more effectual if you infuse a little Castor in part of it and give it, or if you fear the strong smel of that, let a few grains of Musk be added.

Divers commodious pouders are prepared, which are either drank by themselves from one dram to one dram and an half, being dissolved in the waters of Sage, Marjoram, Lavender, Cinnamon, Groundpine, and also with Honey and Rosemary flowers, or Anacardine, or of Squils, or with other Syrups. Or eight parts of Sugar being added to one of Pouder, they are so taken, Or the Sugar being first dissolved with the said Waters, Lozenges are made, and then they are given in greater quantity. Or they are mixt with Conserves and Electuaries.

Of the usual ones the most excellent are, the Pouder of *Diamoschum Dulce*, and *Amarum, Diathamaron, Pleres* with *Musk*, *Rosata Novella*; and other Aromatical Pouders, are convenient.

Instead of which these following also may be prepared, that called *A more simple one of Nutmeg* after this manner. Take *of Nutmegs three drams, root of Pellitory of Spain two drams*, make a *Pouder*, of which if one dram be given for some mornings with *Sage water and Honey of Rosemary flowers*, it wil be a singular Remedy.

Another of Nutmeg being more compounded, wil be thus made, Take *Nutmegs not rosted*, as they would have it, *in number three or half an ounce, the root of Pellitory of Spain one dram, the Leaves of Marjoram, Sage, Flowers of Lavender, Rosemary, each half a dram; Gith seed one scruple, Cinnamon one dram and an half, Cloves, Galangal, each half a dram*; make a *Pouder*, of which, if adding nine ounces of *Sugar* dissolved in *Sage water* you make *Lozenges* they wil supply the stead of the *Lozenges* called *de nuce Moschata*.

A third called Aromatical wil be made thus. Take *of Cinnamon two drams, Nutmeg, Galangal each one dram and an half; Cloves one dram, Pepper, Ginger, Zedoary, seeds of Fennel, Anise, Mountain Hartwort, Peony, Leaves of Marjoram, each half a dram*; mix them, and make a *Pouder*.

The fourth compounded one shall be made thus. Take *of the roots of Pellitory of Spain one dram, Asarabacca half a dram, Angelica one dram an half, Seeds of Bishops weed Carawaies, each two drams*; *Nutmeg, Galangal, Cinnamon, Cloves, each half a dram*; *the three Peppers, both Cardamons, Cubebs, Ginger, Spikenard, Wood of Aloes, each Mastich half a dram, one scruple, the Ashes of Swallows, and a Mans Skul each half a dram*; *Coral half a dram*, make *a pouder*.

Of Conserves and Condites, the Conserve of Groundpine made with Sugar, if it be given to the Paralitick at night going to bed, by a continued course it is said to be a certain help. Also the Conserve of Sage prepared with Honey boyled and clarified, brings great benfit. Likewise the Conditure or Conserve of Acorus, is approved by many.

By mixture of many things, such a Conserve shal be prepared. Take *of the Conserve of Sage, Groundpine, each two ounces*; *of the true Acorus and Nutmeg condite, each one ounce and an half*; *the Conserve of Primrose one ounce, Conserve of Marjoram, Rosemary flowers, French Lavender or Lavender flowers, Ginger condite each half an ounce*; mix them, let him take morning and evening *one dram and an half*.

Adding the pouders the following Electuary wil be convenient. Take *this Confection made of Conserves and Conditures*, and ad of *Confection Anacardine half an ounce*, and of the *former pouder prescribed*, which begins, Take *of the roots of Pellitory &c. half an ounce, of Honey Anacardine* as much as is sufficient, make an *Electuary*, let him use it by it, self drinking afterwards, *the waters of Sage, Marjoram, or Groundpine*, or dissolve it with them, and let him drink it.

One dram of the Confection Anacardine being taken doth good, especially if it be taken every day twice, by the use of which if a Feaver be kindled, as hath been said formerly it wil do good upon a double account.

Opiates also are very much commended by Practitioners, which though they be old, are suspected by me by reason of the Opium, in a stupidity and weakness of the Nerves.

But they give Treacle, Methridate, Aurea Alexandrina, to one dram with Sage water.

Or these some are mixt with other Remdies after this manner. Take *of Acorus condite one ounce, Conserve of Rosemary flowers, French Lavender, Sage, each half an ounce*; *Methridate, Aurea Alexandrina, each two drams*; *Pleres with Musk one dram, Syrup of French Lavender* as much as is sufficient, mix them.

Pills too prepared of things ungrateful, and which are hardly taken in other forms shall be made thus. Take *of the root of Pellitory of Spain, Pepper, each one dram; Mummy or Bitumen half a dram, Euphorbium, Castor, each one scruple*; *Oyl of Amber and Turpentine, each four grains*; receive them in *Honey of Rosemary flowers*, or *of Squils* and make a *Mass*, of half a dram make *ten Pils*, let him often take five at night going to bed.

The Chymical Oyls of Sage, Marjoram, Cinnamon, and other Spices being mixt with Sugar, and used, or made into Lozenges are very profitable.

Suppositories are put up, and Clysters injected, both to sollicite and loosen the Belly, and also to heat; the which as the custom is, are used both before the use of other Purgers and in the progress of the Disease, being prepared in like manner, as we have prescribed in an Apoplexy, amongst which the Gentler wil work more than in them, seeing the sense of excretion is not taken away here, as in an Apoplectical, as also the Stronger wil work yet much more.

Such Suppositories may be made. Take *of Honey, the juyce of Mercury or Beets*, in the winter time *each two ounces*; boyl them a little, afterwards add of an *Ox Gaul two drams*, boyl them again sufficiently, and add *the root of Pellitory of Spain half a dram, Salt Gem one dram*, make *Suppositories*.

Clysters which provoke excretion, and alter too, are very convenient, bewaring of those too emollient, by which the Back-bone being more relaxt, would rather be hurt, that the Vulgar do not rashly beleeve, that Clysters in those troubled with the Colick have given an occasion of a Palsie, the which yet rightly prepared doth do good, and if the cause lie about the lower parts of the back, they are as it were Topick Remedies.

A less laborious Clyster wil be prepared thus. Take *of the roots of Lillies two ounces, Mallows, Beets or Mercury, Sage, Rue, Hyssop, Organy, Groundpine, each one handful*; *Caraway Flowers of Chamomel, Lavender each one pugil*; *Caraway seed two drams, Bayberries one ounce, Bran one pugil*, make *a Decoction* adding a little *Lye*, dissolve *Honey one ounce and an half, Butter half an ounce*, Galens *Hiera two drams, Salt* a little, make a Clyster.

If it be made of Juyces it wil work more strongly, Take *of the juyce of Beets or Mercury two ounces, the juyce of Rue, Hyssop, each one ounce, Honey two ounces, Oyl of Nuts or Butter two ounces*, dissolve them in *salt Broth*, or in the *Decoction of Sage*, or a *Boys urin*, make a *Clyster*.

Of those things which are principally convenient in this case, such a one may be composed the which also if you take out some things, wil nevertheless be effectual.

al. Take *of the root of the true Acorus* (for the *Marshy one*, as *Rondeletius* wil have it, wil not please) *Orrice each one ounce, the herbs Beets or Mercury, Mallows, Sage, Marjoram, Rue, Betony, Groundpine, Cowslip, Hyssop, Organy, Penny royal, Calamint, Centory the less each one smal handful; or a greater,* if you take *fewer herbs, the flowers of Chamomel, French Lavender, Rosemary, Primrose, each one pugil; the seeds of Carawayes, Fennel, Nettle, each two drams; Wild Saffron seed one ounce, Agarick half an ounce,* make a *Decoction,* dissolve in a sufficient quantity, *Honey of Rosemary flowers, or common Honey one ounce and an half, the Hiera of* Galen, *or* Hermes, *or* Logadius, *or of Electuary Indum, Benedicta Laxativa, each one dram;* or take fewer of them in a greater dose, *Oyl of Rue, Spike, or Costus each one ounce and an half; Fossile Salt one dram,* make a *Clyster.*

Those things which ought to be put into the Mouth are these, either there is made an actual Irritation of the Jaws to procure Vomiting, which proceeds in those accustomed to it, or that have first devoured somwhat, as hath been said in giving of Vomits.

Or they are Masticatories that draw forth the flegm, both drying and altering also, which are very convenient, and in a Palsie they empty from the Head, and revel from the beginning of the Nerves. In a Distortion of the Mouth they derive also, if they be often used in the morning,

Nutmeg often chewed is held by all for an excellent Remedy,

A Junket made of Mustard seed, being held in the Mouth, doth work powerfully.

A profitable Composition may be made thus. Take *of Nutmegs two drams, the root of Pellitory of Spain, Mustard seed, each one dram and an half; Cubebs, Pepper, Galangal, Angelico root, each half a dram; Mastich one dram, Wax a little,* make *Masticatories,* if a little *Castor* be added, and they refuse not the smel of it, it wil be most effectual.

Gargarisms perform the same. Take *of the roots of Angelica, Pellitory of Spain, the true Acorus each half a dram; the herbs Sage, Marjoram, Time, Hyssop, Organy, each one handful; Mustard seed two drams, Staves acre, Long Pepper, each one dram; Nutmeg half an ounce,* make a *Decoction* in *Water* add *Honey of Squils* or of *Rosemary flowers one ounce and an half;* mix them, let him wash or gargle his mouth; there may be added of *Wild Saffron seed six drams, Turbith half an ounce, or Spurge two drams,* but if there be danger that they may swallow them, they must be omitted.

Liquid Errhines drawn up into the Nostrils, or the Sick lying on his back, they being distilled by drops into the Nostrils, they do also provoke flegm by their passages. Take *of the juyces of Pimpernel with purple flower, of the roots of Beets each one ounce; the juyce of Marjoram, Rue, each half an ounce; the seeds of Gith, the root of Pellitory of Spain, each half a dram; Castor half a scruple, Honey of Squils half an ounce, Wine one ounce,* make an *Errhine.*

Or anoynt the Nostrils with this following. Take *of the juyce of Sowbread, Pimpernel, each two drams; the juyce of Marjoram one dram, Trochisks of Alhandal one scruple, Pellitory of Spain, seeds of Gith, each half a dram; Castor half a scruple, Honey Anacardine* as much as is sufficient, make a *Liniment.*

Or sometimes let a pouder be blowed into the Nostrils. Take *of the root of Pellitory of Spain, the seed of Gith each half a dram; Castor half a scruple, Euphorbium six grains,* make a most fine *Pouder.*

Suffumigations also are received by the Nostrils as are those Fumes which are prepared in a Dry Bath, of which hereafter, and those things principally applied, which by drying the brain do prevent new Defluxions and strengthen the Nerves.

Outwardly are applied to the Body in the Palsie, both to the parts palsied and to the Back-bone and Head, those things also which can heat very much, that they may recall the Heat of the Nerves and Members, and those things which ought to be exhaust and dry up the humors, and refresh the Nerves and Brain. The which also are convenient for a Humoral Spasm, and these things are then administred by dawbings of Oyntments, Waters, or by Plasters, Garments, Caps applied, or by Baths and Fomentations.

But anoynting are chiefly used, which ought to be applied about the Region of the Nerves, there where the Disease lies in them, as in a general Palsie about the hinder Region of the Neck called the Nape, where if the evil do lurk within the Skul, they may also thrust forth their strength so far; or in other particular Palsies of the parts in the seat affected of the Back or of other Members. Somtimes also they are not unprofitably applied to the parts Palsied, because they allure the spirits into them, and send by communication their vertues even to their affected Nerves, upon which account also the Hands and Feet, and their parts if they be Palsied are anointed with them, and the Cheeks in a distortion of the Mouth; the which anoynting of every part or of the Back-bone will work the better, if the anoynting be actually hot, if there be joyned strong Friction with the Hands, and the Hands with which we rub, be first wet with Aqua vitæ, or the part which shall be rubbed; here also we must observe that we proceed from gentler to stronger by degrees, in this long continued Disease; but these remedies are administred in the form of an Uuguent or Water.

The Unguents are made of divers Oyls, made by Infusion, Expression, Distillation, which are reserved for these uses, chiefly the Oyl of the seed of Asphaltites Trifoil, which is called *de Andacoca,* is accounted for a singular remedy.

But by the mixture of Oyls such an Oyntment may be made: Take *of the Oyls of Rue, Costus, of each one ounce, of Bricks, Foxes, Wormes, of each half an ounce:* Mix them, make an Oyntment.

This excellent remedy may be made of Goose grease: Take *a Goose Picke, unbowelled, washt with white Wine,* And let it be stuck every where with Cloves and Nutmeg, being cut first that they may be thrust in, and let it be stuft with Sage leaves, adding to the same *leaves the Fat of a Fox, or wild Cat one ounce, Pouder of Myrrh, Frankincense, of each half an ounce; Castor, Euphorbium, of each half a dram, Worms stifled in Vinegar, twenty:* Let them be all sowed in, and the Goose rosted on a Spit, white Wine Vineger being put in the pan, into which the juyce and fat sweating forth may distil, and afterwards the liquor being cooled, let the fat that swims a top be gathered, most excellent for these uses.

Another Oyntment, more effectual is made thus: Take *Oyl of Bricks, Spicknard, of each one ounce; of Turpentine six drams, of Euphorbium half an ounce, Frankincense three drams, of the seeds of Gith one dram and an half; of Castor one dram, Saffron half a dram, Wax a little;* Make a Liniment.

Or if it ought to work more powerfully: Take *Oyl of Bayes, Mustard seed by expression, of each one ounce and an half; of the following Gums dissolved in Aqua vitæ,* to wit, *Opopanax, Galbanum, Ammoniacum, Serapinum, of each half an ounce; Euphorbium two drams;* Mix them, add *Oyl of Turpentine half an ounce, Oyl of Bay-berries, and Spike, of each one scruple; Oyl of Agath or Amber by distil-*

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lation half a ſcruple, the roots of white Hellebore, Pellitory of Spain, Muſtard ſeed, Pepper, of each half a dram; Salt Ammoniack two ſcruples, Caſtor one ſcruple, Wax as much as is ſufficient: Make an Unguent.

This will be a moſt excellent Oyl: Take *of expreſt Oyl, old Oyl of Olives, or Lamp Oyl, or that in which Bricks have been quenched four ounces, old Oyl of Nuts two ounces, Oyl of Baies, Muſtard ſeed, of each one ounce; Oyl of Juniper-berries half an ounce, Spike one dram, diſtilled Oyl of Turpentine ſix drams, of Peeter three drams, the juyces of Sage, Rue, Ground-pine, Orrice, of each one ounce; Aqua vitæ two ounces, the fat of a Fox and Gooſe, of each one ounce and an half: Earth-worms firſt waſht in wine twenty, Gum Opopanax, Galbanum, Ammoniacum, Serapinum, diſſolved in Vinegar of Squils, of each ſix drams; Storax, Myrrh, Maſtick, Frankincenſe, of each half an ounce; Euphorbium, one dram and an half, the roots of Pellitory of Spain, Hellebor, Coſtus, Galangal, Nutmeg, Pepper, Muſtard ſeed, the Bituminous Trifoil, Gith, Lavender flowers, Caſtor, of each one dram; Anacardium, ſalt Ammoniack, live Sulphur, Bitumen, of each two drams; Saffron half a dram*: All being rightly prepared, pouder'd and mixt, let them be boyled by a ſlow fire to the Conſumption of the juyces. Let the Oyl be reſerved for uſe, either uſed by it ſelf or mixt with other things.

The other Oyls diſtilled out of Plants, beſides that already ſpoken of, of Spike and Juniper, which are extant every where, and are prepared in great quantities, are convenient, as of Sage, Rue, alſo of Spices, which being added to theſe Liniments do very much increaſe their vertues.

The uſual Unguents convenient here, are of Bdellium, Agrippa, Aregon, Martiatum and the like, uſed by themſelves, or mixt with the reſt.

Waters made by a long Infuſion in a hot place, or extracted by heat, do Egregiouſly penetrate, eſpecially if Oyl alſo doth diſtil forth more plentifully with them, and being laid on inſtead of Unguents, they profit very much.

The more Simple are, if Sage, Roſe-mary, Time, French Lavender, and other things Appropriate, and ſweet ſmelling, being ſteeped in Aqua vita, be applied.

Of thoſe Compounded, many called Compound Aqua vitæ's are made for theſe uſes, of which this will be very convenient: Take *of the roots of Orrice, Hogs-Fennel, Angelica, the true Acorus, both Galangals, Coſtus, Pellitory of Spain, white Hellebore, of each one ounce; Cyperus, Zedoary, Ginger, of each half an ounce; the leaves of Sage, Time, Roſe-mary, Rue, Marjoram, Ground-pine, of each ſix drams, the flowers of both Lavenders, French Lavender*, St. *Johns-wort, Prim-roſe, of each half an ounce; the ſeeds of Muſtard, Gith, of each two drams; Juniper and Bay-berries, of each one ounce; Nutmeg half an ounce, Cloves, Mace, of each two drams; long and round Pepper, Cubebs, Spikenard, wood of Aloes, Yellow Saunders, of each one dram, Saffron half a dram, Frankincenſe, Myrrh, of each half an ounce, Liquid Storax three drams, Euphorbium, Caſtor, of each two drams; Earth-worms waſht in Wine twenty, Salt-Niter half a pound*: Being prepared and pouder'd, let them be bedewed with the moſt generous Wine, till they are made like to Frumenty, then diſtil them according to art.

Thoſe called Artificial Balſomes which yeild more Oyl, are prepared divers waies.

One more ſingle is thus prepared: Take *of Dane-wort, the leaves and root, Sage, Lavender, Rue, all with their leaves and flowers, freſh, bruiſed, bedewed with Aqua vitæ, of each one handful; Caſtor two drams, Turpentine half an ounce, Salt Ammoniack two drams, Worms waſht in white Wine twelve*: Draw forth a water with the Fire of aſhes, fitted for theſe uſes.

A Compound Balſom, ſhall be made thus: Take *of Frankincenſe, Maſtick, of each one ounce; Storax, Benjamin, Myrrh, Gum Opopanax, Bdellium, Elemi, Serapinum, Ammoniacum, Sarcocol, of each half an ounce; Euphorbium three drams, Aloes, Ladanum, of each two drams; Caſtor one dram, the root of Galangal, Coſtus, Nutmeg, of each half an ounce; the leaves of Sage, flowers of Lavender, Ground-pine, of each three drams; Juniper-berries half an ounce, ſeeds of Gith one dram, Turpentine or Roſin of the Larix tree the weight of them all*, viz. *ten ounces*: Let them be diſtilled according to Art, and there will flow forth a Water and Oyl, the which may be anointed together or a part.

Alſo if the Back-bone be anointed with Confection Anacardine. and Aurea Alexandrina, diſſolved in Aqua vitæ, in which Sage hath been infuſed, it will be an effectual Remedy.

Plaſters made of the ſame Unguents, adding Pitch and Roſin, which are good of themſelves, or Cere-cloths made by increaſing the quantity of Wax, do perform the ſame, and becauſe they may ſtick long, they work powerfully; the which are worn applied to the Back-bone alſo, or to the part affected.

Of the uſual ones are commended, that of Bay-berries, de Betonica, Ceroneum; as, Take *of the Plaſter Ceroneum, of Bay-berries, of each one ounce; Frankincenſe half an ounce, Caſtor, Euphorbium, of each one dram; the ſeed of Gith, Creſſes, Muſtard, the root of Pellitory of Spain, Saffron, ſalt Niter, of each half a dram, with Oyl of Bricks or Turpentine*: Make a Plaſter.

The Pouder of Worms, applied Plaſter wiſe to the Nape of the Neck, with Pepper and Honey, doth wonderfully profit.

Coverings and Garments of Skins and Feathers, do good not only by retaining and cheriſhing the heat in the parts, but ſome of them, alſo are beleeved to help by a propriety, if the Palſied Member be wrapped, cloathed or coverd with them, as Fox and Hares skins, Gooſe Feathers, and thoſe of Doves, Cranes, and wild birds; the which alſo, as other things which ought to come about the Body, if they be ſmoaked with Frankincenſe, Maſtick, Storax, Benjamin, with Spices, and other ſweet things caſt upon the Coales, they will do it more effectually.

To the Head and Neck theſe things may be applied in a dry forme: Take *of the rootes of Acorus, Galangal, Orrice, the leaves of Sage, Marjoram, Balm, flowers of Lavender, French Lavender, Roſemary, of each one dram; ſeeds of Coriander, Gith, of each half a dram; Nutmeg two drams, Cubebs half a dram, Frankincenſe, Maſtick, Storax calamite, of each one dram and an half*: Make a Pouder for a a Pillow, or a Bag which may be laid under the Head and Neck, or for a Cap to be worn.

To Plunge or bury the Members for a while in Sand, or hot Aſhes, or boyling Wine preſſes, or hot Dung, doth very much help.

It is counted a ſingular Remedy, by ſome for reſolved Members to thruſt them oftentimes into a Tub in which Aqua vitæ, or the Spirit of Wine hath been kept, one end being taken out, and it being heated with lighting of Juniper wood, to provoke ſweat out of them.

Sage is thought to do good, being only carried in the Hand, perhaps rather by its ſent then touch.

If they Plunge their Body, in a heating and drying Bath, ſo that it contain the Palſied Members and the greater part of the Back, by altering & calling forth the Humors, ſomtimes they may help upon that account, the which hotwithſtanding ought to be effectual, leaſt that they moiſten more by their actual Humidity, then they potentially dry.

For which reason they are sent to Natural Baths, if other Remedies help not, and the Disease be now a long time prolonged, and the Patient otherwise labor of no other fault, and nothing hinders, as to the last refuge, the which they are commanded to use for a Month and further, till their Skin be florid, and whol again: but the Alum and Nitrous Baths are chiefly convenient, because they dry, they likewise commend the Sulphureous ones but they mollifie very much; the Atrimental, Acid, cannot do so much good. Because acid things are enemies to the Nerves: the Salt ones Sea-water, or Spring-water heated, because they dry, without doubt wil be profitable.

Artificial Baths wil do the same; if you mix with the Waters Salt, Alum, Tartar of Wine to make them drying, and often quench Iron or Steel in it, such as Smiths-water is, or adding the Ashes of pruning of Vines, of Bones, and Lime. You may make like a Lie and that the Bath may be more appropriate, and hearing, you may boyl the Plants by and by to be reckoned up, in a dry Bath, in some Water prepared of those things even now spoken of, adding a Lye or Smiths water. Or if you boyl the same Plants in the Decoction of a whol Fox.

But if particular parts palsied be plunged in these, or be fomented, or washed with them, as the Hands or Feet, they wil do good.

For which this is also convenient. Take *of* Sage, *Juniper berries and Leaves, the greater Spunge each* as much as is sufficient, boyl them in a *Lye*, with which foment or wash the part.

If the Palsied parts as the Hands or others may be plunged in the like Liquid Oyls or Liniments, it wil be convenient to foment them awhile with them, for the performance of which seeing a good estate is required, this ought rather to be done in rich folks.

By the encompassing Air, the strength is not only preserved, but also if it be pure, the body is made less foul, and as the cold Air is chiefly hurtful, seeing the Members of the Paralytical are otherwise cold, & Cold is an Enemy to the Nerves, so that which is Hot and Dry doth very much good, because it corrects the Distemper; but such is either by reason of the Heavens, and must be let in from thence, whence it may be had, or is made such by Art, by Fires, by Suffumigations; and also if Pidgeons be converfant with the Patient in the same Air of the Chamber, they say that it doth by a propriety resist the Palsie.

If also it be applied so Medicinal, viz. made Hot, Vaporous, or Smoaking, that it draw forth the Humors, by insensible Transpiration, or manifest Sweats, the body being first fitly purged, it is a Remedy which doth wast from the part affected, but the conjunct and Antecedent cause, and oftentimes is the prime Remedy in curing this long continued Disease.

But let the Air be thus heated in his Chamber shut up or under his bed, and that either with Fire alone or also with the Vapor of some Decoction, which exhales of its own accord whiles it is hot, or if red hot flints or metals be quencht in it, it sends forth a Vapor and Smoak, in which let the Patient fasting, sit Naked, and repeat it often according as he can wel endure.

But the Decoction for this Evaporation, may be prepared of things following which do together powerfully heat and strengthen. Take *the root of Dane-wort three ounces, of Acorns, for the rich, one ounce, Hogs Fennel of* Dioscorides *two ounces, the herb Sage, Groundpine, Primrose, each two handfuls; Organy, Pennyroyal, Wild Time, Calamint, Hyssop, Marjoram, Rosemary, Time, Bays, flowers of Chamomel, Elder, Juniper berries, of every one of them or some of them a greater or less handful*, according as they are taken boyl them in *Water*, adding a *Lye* and *Wine*, for a *Stove* or *Dry Bath* as they call it.

In a great and almost desperate Palsie or Resolution of the Limbs, much may be done if Sweat be provoked oftentimes with intermitting rest, in a Chest made convenient to lie in, being every where close shut, the Patient being placed with Pillows under him, with his Head out, and the hole of the Chest about the neck of the Patient, being very wel stopt, the Vapor entring the Chest through the beak of an Alembick ful of many holes, by another hole in the bottom of the Chest, in the bottom of which Alembick put under, the following things have boyled by *Balneum Mariæ*.

Take *of the Alcohol of spirits of Wine four pound, the Essences of Sage, Rosemary, Lavender, Marjoram, Time and Organy each two ounces*; let the *Vapor* be so long admitted into the *Chest* as the Patient can well endure it, but when the Patient is now sufficiently moist, and the heat being too much increased, *the beak of the Alembick* is drawn forth, let that which drops forth, till the matter contained in *the bottom* be cool, be received in a *Receiver* large enough and well closed up, that it may be kept for further use, which shal be with the same *Liquor* or *Spirit heated* to moisten and rub the *palsied Member* and *parts of the Patient*, after that being taken out of *the Chest* and the *Sweat* wiped off, being placed in his bed he hath sweat again; but first wiping off the *Sweat*.

If the Palsied Member be suffumigated before the fire, with Frankincense, Mastich, and other sweet things, it wil very much strengthen and stir up the heat in it.

We shal help by motions of the body by decent exercise which doth egregiously wast the humors and stirs up the parts laid asleep, and recals the animal spirit into them, heats the Cold and strengthens the Soft.

The which if they cannot perform of their own accord that ought to be accomplisht in them by the help of Servants, by raising and bearing them up, that they may be able in some sort to walk, and the Patient himself must endeavor to use his languid Members, and being idle, continually stir and exercise them.

Friction is chiefly convenient, being made both for Diversion sake in the sound parts, and performeth the same benefit being applied to Sick, seeing nothing doth more powerfully allure the spirits, which is done only by the hands of the standers by or also by applying a rough hot Cloth, or the Patient himself may do it by rubbing the sick parts with the sound.

All which wil be administred with better success in a fitting time, the Patient being fasting, and the body first purged.

By motions of the mind also we discuss the humors, in Watchings longer than usual, for a good while continued, and we prevent that they be not heaped up by immoderate sleep.

They feel benefit by some Affections of the mind that inflame the body, if so be that they do not too much weaken, as by Anger, seeing a Feaver also as hath been said, doth not hurt,

Amongst manifest Openings, only Bleeding takes place in the Plethorick, seeing we know that the abundance of this Flegmatick humor is produced from the plenty of crude blood or fomented by it, but then also it must be done sparingly in the Arm, of the sound part, neither must we credit the Arabians who teach us to draw so great a quantity of blood, seeing by that their languid heat is extinguisht.

Scarification also brings some help, not by reason of the drawing forth of Blood, but by reason of the Cupping-Glasses applied upon it: the which yet are more profitably

profitably faſtned to the ſick parts, but without Scarification that they may more ſtrongly attract the ſpirit thither; and that they may divert the humor from the Nerves poſſeſſed with it, diligently obſerving the place where the cauſe of the evil lies, eſpecially if this be about the Marrow of the Back, the Cupping-Glaſſes being faſtned a little below deſcending by degrees to the palſied member, they oftentimes free the Nerves from it.

Inſtead of which Rubefiers and bliſtering Remedies, ſtronger than theſe do effect the ſame more ſtrongly. Of which they are wont to apply the ſtronger Veſicatories, or inſtead of them Cauſticks and Setons, to the hinder part of the Neck, which they call the Nape, which wil be then moſt convenient, if in a general Palſie the cauſe be neer to the Brain, although alſo it doth good, if the cauſe lurk there about the beginng of the ſpinal Marrow in a Hemiplegia, becauſe it calls it forth, and moves it from its place, and alſo Cauſticks applied to the Arm, do revell the humors.

The Cure of Palſie or Spaſm from other humors.

If a Palſie be cauſed from a Watry Flegmatick or Serous humor, mixt with acrid cholerick humors, not only bedewing the Nerves but alſo irritating them, as after Colick pains we have ſaid it doth moſt frequently happen in our age, with Pain and ſenſe of tingling; then the Cure as long as the Colick pain laſts ſhall rather be applied to that, and thoſe evil humors muſt be purged forth, as hath been ſaid there, and thoſe things ought rather to be applied and given, which by lenifying the Nerves may hinder Convulſions into which it is wont eaſily to terminate, as hath been ſaid in Convulſions; in the interim not raſhly foretelling any good event: becauſe if Convulſions be ſupervenient, it is wont eaſily to kill; but if that other Diſeaſe ceaſing, that do accompany theſe Palſies, they do remain in many or particular parts, then the ſame cure muſt be adminiſtred, which hath been explained in a Flegmatick Palſie.

It hath been ſhewed, that from Blood a Palſie cannot be cauſed, eſpecially a laſting one which if it be as Practitioners have writ, becauſe then the Blood conſiſting yet in the Veins, eaſily goes back by its part inverted, if it be cauſed by the perverſe Scituation of it, and by and by ceaſeth: or if it be from a Plenitude, it will be Cured by bleeding, and by other things that revel and derive.

The Cure of a Palſie from cooling.

If from too much Refrigeration of a Muſcle and Nerve by the external cold (for concerning that which is cauſed by a flegmatick Humor hath been ſpoken already) not only a Stupidity as that happens, but alſo a Reſolution of the Member be cauſed, then as hath been ſhewed in a Stupidity, it is corrected by things actually hot, applied by degrees and by Frictions, by which unleſs it ceaſe, thoſe Topick Remedies which have been explained in a Flegmatick Palſie, *viz.* anoynting, Fomentations and Baths according as their form is appliable to the part affected, will here alſo take place.

The Cure of a Flatulent Spaſm from Wind.

If a Flatulent Palſie be cauſed from Wind, therefore ſo called, whether they be the cauſe of it, or if it be cauſed from the too much aſtriction of the Muſcles, by increaſing of it, they render it more vehement and laſting. Then if this happen but ſeldom, it can ſignifie no evil, becauſe it proceeds from a manifeſt cauſe, too much Motion, or Refrigeration, and therefore it is neglected, but if it return often, becauſe it breeds great trouble, and weakneſs, the Limbs becauſe it hath an internal cauſe accompanying it, plenty of Wind, and an undecent Connexion of the Muſcles, as hath been ſaid, it muſt not be neglected, becauſe ſomtimes it can ſcarce be wholly taken away.

Which if it moleſt not only in the Feet and Joynts but alſo elſewhere, as in the Back or lower Jaw or Mouth, it wants not its danger of falling to an Epilepſie, and therefore as hath been ſaid there, we muſt provide againſt it betimes.

But in other Cauſes, the following Remedies ſhal be uſed both for prevention out of the fit, if it return often, or in the fit if it continue; which diſpel Wind and Relax the bound up Muſcles.

There are given to hinder the Product of Wind and to diſcuſs it, as well in courſe of Dyet, as in purging Medicines, heating, and ſtrengthning, ſuch as in windy caſes, eſpecially of the Stomach, we ſhal explain in their proper places.

There are applied to the Muſcle affected, which we know by the bunching forth of the place, and pain) thoſe things in the fit which are Actually or Potencially heating, and diſcuſſing Wind do help by Lenifying and Relaxing the part. But out of the fit, thoſe things which do alſo by ſtrengthning the part with a light attrition provent the often returning Diſeaſe by uſing almoſt the ſame, which in a Flegmatick Palſie and true Contractions we have ſhewed to be the gentler, and have there deſcribed them.

Anointings are made with Oyls of Chamomel, Lillies, Dill, or after this manner, if the part muſt be ſtrengthend too: Take *of Oyl of Chamomel or another of thoſe three, one ounce, of Foxes or Worms, Maſtick, of each half an ounce*: Mix them, anoint the part hot, your Hands or the part being firſt moiſtend with Aqua vitæ.

Oyl of Guaicum anoynted with Aqua vitæ and Sage helps ſpeedily.

Or make Plaſters amongſt which Martiatum is convenient.

The Warers and Balſom Oyls explained in a Palſie are convenient, amongſt which ſimple Aqua vitæ applied alone, gives preſent help, if it be hot.

Treacle diſſolved in Aqua vitæ, rather then in Oyls as they teach, and anointed, will profit very much.

Fomentations, Inceſſions, Baths, reckond up in a Palſie and Contraction will do good, being actually or potentially hot. Amongſt which a Lie may be applied, as ſhall be ſaid in the Gout, for prevention ſake, becauſe it confirmes the Lax parts and thoſe which receive the Humors or Wind, adding ſome things that ſtrengthen.

This Plaſter is very much approved: Take *of Wormwood, Penny-royal, of each one handful; Bay-berries one pugil, Cummin half an ounce*: Bruiſe them, boyl them in ſtrong Wine and Honey: Make a Cataplaſm.

The Bags preſcribed in a Palſie being firſt bedewed with Wine will do good alſo, or thus when by ſtrengthning we would prevent the evil: Take *of the flowers of Chamomel, Melilot, Roſes, Bran, Juniper or Bay-berries, of each one pugil; Myrtles half a pugil, Orrice roots half an ounce, ſeeds of Fænugreek, Caraways, Cummin, of each three drams; Salt one pugil*, for a Bag.

A Bag may quickly be prepared for uſe, only of Millet, Bran, and Salt.

Hot Skins, and other the like things are convenient.

Alſo gentle Friction, with the Hands or hot Cloths.

By drawing back the part affected, we ſhall make the fit ſhorter, or that it preſently ceaſe, if the Muſcles that are involuntarily violendy extended, or bent, and by that drawing the Member, we do voluntarily endeavor by

by a contrary motion and ſtraining, of the Muſcles which are oppoſed to the diſeaſed ones, to draw them back together with the Member: for ſo being bound up or out of the way, they are Relaxt again with the Members, and recover their natural Scituation, and the Wind, which did poſſeſs the ſpaces of them contracted, when the Muſcles return into their place, is repeld from thoſe places and forced to give way, which in the Muſcles that conſtitute the Calf and Feet and move the Toes, being contracted we dayly find by experience, is done by a contrary extenſion and the pain preſently ceaſes.

The Cure of Contraction from drineſs.

From drineſs or Inanition, as they would have it, of the Muſcles, or their Tendons that draw the Member, and ſomtimes of the Nerves or Ligaments that compaſs the joynts, if there be a Contraction of that part to which theſe ſerve for Motion, whether it happen in the Back or other places, if their drineſs be great, the evil is incurable; as when this comes to paſs, by reaſon of Age and labor. But alſo it is hardly cured, if cauſed for other reaſons, it hath been of long continuance, as we ſee for the moſt part, thoſe Contracted in the Hands, Feet, and laboring of a *Tetanus*, do remain contracted in thoſe places all their life time, or are only changed a little for the beter.

Yet nevertheleſs the Cure is ofttimes profitably applied at the beginning with ſucceſs, and by this Method, by applying outwardly to the part affected, Moiſtning and Laxating Medicines, of which becauſe ſome of them do cool, the cheif part of the Cure is performed by mixing hot things with them, and thoſe that ſtrengthen the Nerves, to wit if they be applied to the Muſcle and its Tendon and to the Body which ſomtimes is neighboring to the Member that draws, but at other times far diſtant, and is extended to it by a long, ſomtimes a very long Tendon; alſo to the joynt if the Ligaments are bound up.

The Back therefore with the Bone is anointed in a *Tetanus*, or the Members in other Species of contraction after this manner: Take *of Oyl of ſweet Almonds freſh one ounce and an half, of Violets, Lillies, Chamomel, Flax made by expreſſion that is new, Worms, of each one ounce; Oyl of* St. *Johns-wort, the Mucilage of the ſeeds of Flea-wort, Flax, the fat of a Duck, the Marrow of Calves legs of each half an ounce; Turpentine two drams, Sulphur two drams and an half, pouder of Worms one dram, flowers of* St. *Johns-wort, of each half a dram; Saffron one ſcruple, Wax* as much as is ſufficient: Make a Plaſter.

They magnifie the fat of a man in this caſe, as alſo of Eeles, perhaps becauſe that is counted appropriate, and this more moiſt, becauſe it is taken from Fiſhes.

A Bath in a *Tetanus*, or *Irrigation* in others, or a Fomentation of the place affected, may be made of theſe things, applied Warm, of ſweet Water, Milke, fat broth of the Head and entrals of a Weather or Calfe; Water and Oyl, or Oyl alone, eſpecially of Violets.

Or of the following Decoction: Take *of the roots of Marſh-mallows, Bryony, Lillies, of each one pound; freſh Orrice root half a pound, the Herbs Mallows, Violets, Lettice, Arach, Cole-worts, of each one handful; Sage, Ground-pine of each half a handful; Flax ſeed, clean Barley, of each one pugil*: Boyl them in Water for a Bath to which alſo the other things may be mixt.

Sulphur Baths have a great vertue to Mollefie, becauſe nothing is fatter then Sulphur, as hath been demonſtrated elſewhere.

Pultes applied to the part becauſe they remain there, do highly profit, as Melilot. de Mucilaginibus, Reſumptiaum, and the like, prepared of the forementiond Unguents.

Or Cataplaſms alſo are made of the foreſaid Plants in the Bath, which do help more then the reſt being worn a long while and often renewed.

This alſo is moſt commendable: Take *of the freſh roots of Marſh-mallows, Briony, of each two ounces; of Mandrake one ounce, freſh leaves of Henbane* (which I have known by experience, as alſo Mandrake do wonderfully Mollifie) *Mallows, of each one handful*: Boyl them in Milk, bruiſe them, adding *the flowre of Flax ſeed two ounces, Flea-wort, Quinces, of each half an ounce; Hogs and Gooſe greaſe, of each one ounce; Oyl of ſweet Almonds, freſh Butter, of each half an ounce; Bay-berries two drams, Saffron half a dram*: Make a Cataplaſm.

The Caule, Meſentery, Kidneys, with the fat, being made warm, are laid on the ſick part.

Skins of themſelves or firſt anoynted with Oyl, being newly puld off, eſpecially Fox Skins do good, and a Gooſe Skin with the Feathers.

We can ſcarce do any thing ſingular, by things taken inwardly, or injected here, unleſs by accident in relation to that Diſeaſe but in a Convulſion or particular Spaſm, they help very much.

If the contracted Members can be ſeparated by manual operation, then though they be not made moveable again, the which yet ſomtimes comes to paſs, nevertheleſs another form may be fitted for them, which brings a leſs impediment in Motion: as if the Fingers being extended be ſtopt, then if they be contracted, they are leſs prejudicial in laying hold of things; if the Foot ſtick drawn upwards, being drawn back to the ground, although the joynt of the Knee remain fixt, yet it reſtores the going which before was taken away.

But this we may ſomtimes do in ſome places with our Hands, or application of Inſtruments forcing it ſomwhat down dayly, not with a great force, but by little and little, in proceſs of time more and mote relaxing the bound up Tendons and Ligaments, and that according to the Nature of the Member contracted, divers waies; as if by reaſon of the joynt of the Knee fixt, as it often comes to paſs, the Foot be drawn upwards, putting on the Shoe and tying it elſe where, by continually drawing it down, whiles they ſit and do any thing: or by hanging a weight to it ofttimes depreſſing it; the which alſo is neatly performed, if two oblong plates hollow in the middle, fitted to the Leg and hinder part of the Hips and joyned about the joynt, by interpoſition of an Engin and turning it as long as he is able to endure, the Foot be forced by degrees from the upper parts downwards, and alſo it is commodiouſly performed in other places after the ſame manner by an Engin having caannelling, becauſe if it be turened, by degrees preſſing thoſe parts into which it is inſetted, it forceth the fixt Member, and becauſe the Engine ſo turn'd remaines immoveable, the ſame doth ſubſtain and return the Member as far as it hath thruſt it. Which I have made tryal of in many with ſucceſs, the Inſtruments being Ingeniouſly made. As alſo if a Finger remain extended, a Ring being put upon it, which muſt be Contiguous and faſtend to another Ring applied on the next Finger; whiles this Finger is moved, the other which is fixt being continually forced, is at length compeld ſomwhat to yeld and bow.

The Cure of a Contraction, or Spaſm from a Tumor.

If the Member be ſtopt by a hard Tumor, Callus, or Skar growing in the Tendons, and Ligaments, or if by poſſeſſing or preſſing a Nerve they cauſe a Palſie, there is no other manner of

Cure

Cure ordered then by Emollient things, which is due to these also arising in other places, as shall be explained there: in the interim the fixt Members, if they be very prejudicial in that Scituation, they must be continually drawn into a righter and less incongruous form, by actual labor, as was said even now.

The Cure of a Palsie from compression.

If a Palsie be caused from a violent compression of a Nerve by a burthen or bound, then these Impediments must be removed, and the bands loosed; the which being taken away, if a Stupidity or Palsie do continue, the spirits must be recalled by Frictions and other hot things applied, spoken of in a Flegmatick Palsie: seeing a Nerve is scarce prest by a Bone Luxated, but rather other discommodities follow from thence, they shall be explained in them.

The Cure of a Palsie from a solution of continuity.

If a Palsie be from a Wound, a Tendon, Nerve, or Ligament being cut in two, it is incurable, yet there are Chyrurgions that are wont to sow together Tendons cut in two. If this come to pass from a Muscle wounded transversly, the same cure must be made as in other Wounds, the which also oftentimes helps; but if it be wholly cut off, because then it is drawn back both waies, and is hardly joyned together again or retained, nevertheless there remains an immobility of that part, when the Wound is cured.

If a Palsie be caused by a Contusion, Blow, or Fall, if there follow an Inflamation in a Nerve a Convulsion easily ensues, which is deadly; that this therefore may not be, the Blood must presently be revelled by opening a Vein and otherwayes; but upon the part contused, cold, astringent things must not be applied, but those which digest too.

Such a Plaister as this. Take *of Mastick, Frankincense, Gum of Ivy, each half an ounce: Mummy two drams, Pouder of Worms one dram, flowers of Chamomel, Roses, of each half a dram: Oyl of Roses, Chamomel, Wall flower, of each one ounce; Turpentine and Wax* as much as is sufficient: Make a Plaster.

At the end, when there is no more fear of an Inflamation, let it be anoynted with the Unguents mention'd in a Flegmatick Palsie: if the Palsie continue still, to recal the heat of the Nerve, and the Palsied parts, this will be most excellent: Take *the roots of Pellitory of Spain four drams, Pipper three drams, Sulphur five drams, Pouder of Worms two drams, Castor two scruples, Euphorbium one scruple*: Let them boyl in ten ounces of Oyl to the Consumption of half: anoint the Vertebræ of the Neck and Back, the Emunctories also, and places affected.

If a Callus be left in a Nerve, how we must proceed, hath been already said in a hard Tumor.

The Contusion of a Muscle or part which is moved, requires no other Cure then a general Contusion, of which we shall treat in its place.

The Cure of Immability from the Fracture of Bones

If the Fracture of a Bone be the cause, that a Member cannot be moved, then by manual operation chiefly we shall endeavor to set the broken Bone. If it decline from the other, and shorten the Member; then we must retain those now joyned, or those which though they be broken, yet do still hang together, that they part not a sunder: afterwards we must apply Medicines to the place affected, that asswage pain, and keep off an Inflammation, if need be, and those things which help also the Bones that they may be Conglutinated, and grow together, or Consolidated. Which they do by accident, chiefly by taking away the Impediments, and by somwhat binding the Fracture, and as it were obliterating it by an Emplastick vertue, because otherwise the Concretion it self of the Bones is perfected only by the labor of Nature, by the benefit of the juyce that nourisheth the Bones, as of Glue, as hath been said concerning Wounds.

We set and joyn again the broken Bone (if nothing else hinder, as the Splints of Bones broken, which must be first taken away, as shall be said in its place) either by our Hands only, or moveover applying Instruments, as shall be said in a Luxation, drawing it by degrees so far, till it come to the end of the Fracture of its Bone to which it was joyned, and then thrusting it with the Hands it must be decently joyned again with it, and that as much as may be most evenly, for so both suddainly and easily it grows together with it again, but if it do not joyn it self with it, nor rightly as before, then it must needs be that they grow together again, by a Callus intermediating, so large, as that distance remained. From whence, because that cannot be done so suddainly, the Cure is prolonged, and the Member oftimes remains crooked, or otherwise ill shaped.

We retain the broken Bones together, if first of all we wrap them decently in Swaths, then putting about them thin boards or Bark, or the like Instrument on the part affected being first swathed up, which may comply with their hollowness, we must bind them so, and that the bound up Bones may not easily move out of their place, we must tie them straight, and so afterwards they keep the part quiet.

Somtimes we Foment the place affected, before it be swathed, according as we would allay pain, or bind, for fear of an Inflamation, either with red Stiptick Wine, or with the Decoction of Elm and Mirtle leaves, or with Oyl, Wine and Vinegar mixt together, with unwasht Wooll: or the Swath it self is moisten'd with Oyl of Roses, or Oxycrate before it is applied.

Or the place affected is anoynted first with Oyl of Roses, Mirtles and the like, by reason of the pain, for when we would binde, the following form is more profitable.

The part being already bound, as hath been said, tis encompassed with Plasters the which also are somtimes applied to the naked part, if necessity require it, and afterwards the part is bound, but then they must be often changed.

The more simple ones are: Take *of Comfry, the roots of Cranes bill*, as much as is sufficient, bruise them, and being mixt with *Hogs grease*, let them be applied.

Another, Take *of Mastick, Frankincense, of each half an ounce; Bole one ounce, Aloes, Dragons blood, or the binding Bean-tree, of each two drams: Gum Tragacanth, Arabick, of each one dram: the Volatile Flowers of a handmeil two ounces.* With the *white of an Egg*, Make a Plaster.

Or thus; Take *of the Volatile flour of a Handmil half a pound, the flour of Barley and Beans, of each three ounces, Bole two ounces, Parget one ounce, the Blood stone half an ounce, Frankincense three ounces, Comfry root half an ounce, the Ashes of Crabs shels two drams*: Make a Pouder, which the Chyrurgeons may keep for they use, that then when there is need, they may mix it with the white of an Egg to the form of a Plaster, adding *Oyl of Roses* that it dry not too much, and may stick.

Certain things given to drink, are thought to help very much the Consolidation of the Bones, as we shall say concerning Vulnerary Potions. Thus *Dioscorides*

approves the Decoction of Mullein: *Matthiolus* the juyce of Prim-rose; the more modern give of the *sandy Stone of Osteocolla one dram powdered* with *Wine*, in the morning three times at the least, whose efficacy they wonderfully commend, and I have made tryal off.

As concerning a course of Dyet and other general help, we must take care that the Body be kept clean and pure, and be not Constipated by its lying down: and Blood must be taken away, if an Inflamation be feared.

If a Luxation of a joynt caused by force, or by reason of the Laxness of the Ligaments doth stop Motion, and the Separation of it be only slight, sometimes it returns again into its place, of its own accord, by the proper Motion of the Member. But if there be a total Dislocation, there will need greater force to reduce the Bone, by drawing, forcing, pressing it, and that it fall not out again, by retaining and confirming the joynt, that it slip not again, and by taking away the Impediments. which is performed in some joynts easier in others with greater difficulty, in some not at all, if it hath been of long continuance: and the Bone hath made it self a socket elsewhere.

We draw the Bone which in an *Exarthrema* from another Bone, being carried upwards by it, doth shorten the part, till it be reduced again under the Cavity of the other Bone. Which is performed either by the Hands alone, if it give way easily, but if otherwise, by applying a Swath also by the help of others, or by the succour of Instruments. As in the Thigh Luxated, there is need of great endeavor to reduce it, but the Jaw being Luxated we reduce it divers waies laying hold of it by the grinders and drawing it: but we draw back the Vertebræ in a bunch of the Back crookt outwardly, inwardly, or to the sides, and removed out of their place by a contrary straining, by standing or setting so bowing the Back, that its crookedness is raised up by degrees, because this cannot be done by any force used. Wherefore that is done most rightly in such a posture of lying in which they continue longest, chiefly by the help of an Instrument, by which the part in the Interim is prest, as shall be said.

We force it by violently thrusting the Bone, which in an *Exarthrema* is attracted, or in a *Paraithrema* is departed from the middle to the Circumference. As also in *Arthrodies*, if many Bones have parted a sunder, by pressing the Bone there, where its top stands forth, towards the opposite seat which is hollow, so far till it fal again into its socket, or be put again into its place, which we sometimes know by the Noise that it makes. But this is commonly done easily by the Hands alone, if so be it be forced to the right place, but at other times there is need of greater strength to do it, when the Shoulder is faln downwards under the Arm-pit: for then when the Arm is extended, it is raised up by a Chyrurgions Shoulder put under it, or by some other Artifice it is prest upwards with great force, which is not performed without great pain, as it were of a rack.

By pressing the Vertebræ of the back by degrees, dislocated in their moveable Connexion the bunch of the back bunching forth backwards sometimes we correct its crookedness whiles it is yet in making and not confirmed, commonly in the younger sort only. Which seeing it is not compleated, but in a long time, there will be need of an Instrument fit for it which continually cleaving to the part, may successively press it. Such as is a breast-plate put on of Paper, or pitcht Leather, or made of a Plate of Iron, pressing the Gibbous part, the same is effected by a Cloth breast-plate, in which a Plate of Iron, or Lead is sowed, or by some other Art.

We keep the Joynt being joyned again, inquiet, that it be not again separated or dislocated, if we keep it immoveable, and that until the parts which were relaxt, being confirmed, the Joynt afterwards, can subsist in its own place, when it is moved again: which wil be more rightly done by underpropping the Member putting Pillows and Cushions under it; or also hanging it in a string cast about the Neck, in which putting in the arm, we keep up the the Shoulder that it fal not down again. But also in danger of a Luxation, a part being lengthned and relaxt, seeing we cannot alwaies abstain from Motion, we must take care at least that it be not too vehement; as also they who do easily suffer a Luxation of the Jaw, they must abstain from that strong opening of the Mouth by yawning. And they that have a bunch growing, they must be moved, so that they do not very much incline or bend their Body, but as much as may be, they must keep it upright, and that by the Instrument even now mentioned, not only the bunch be prest, but also the Back be kept upright.

Also Ligatures are applied, if the Bone reduced do hardly stay, and the part can be bound a little.

Moreover Remedies are sometimes applied extrinsecally, if pain urge, the which presently ceaseth, if the Member be rightly reduced. Or if any thing else be joyned, as an Inflammation, Fractures, or sinuous Ulcer, which sometimes pours forth its Matter by the Hip, as hath been said, whose Cure shall be explained in their places.

To confirm the Joynt when there is fear of a Luxation, or if there have been one, and being reduced again, that it may not easily return, astringent Remedies are applied to it, which by drying may waste the Moistures of the place, especially also if they be the cause of it.

The Joynt is to this intent most profitably wrapped up in a Cere-cloth that doth allay pain, and strengthen the Juncture. Take *of Rams fat, white Wax, of each half a pound:* Dissolve them, mix of *Volatile flour of a Mill two ounces, Frankincense, Mastich, Bole, Dragons blood, of each one ounce; Comfry roots half an ounce*; and whiles they are hot, stir them together, and dip the cloth, till this matter grow to it, apply it.

Such Plasters also as we have described in Fractures are here convenient, or this following: Take *of Frankincense, Mastick, Colophony, Rosin, Pitch, each one ounce; Wax and Oyl of Roses*, as much as is sufficient: Make a Plaster, let him wear it.

A Cataplasm if necessity require, may be made thus, especially when pain urgeth: Take *of the roots of great Burr* (which *Dioscorides* teacheth doth very much asswage pain in the Luxated) *of Daffodil, of each half a pound; leaves of Plantane, Nettle, of each two handfuls*: Boyl them in red Wine, add *of the Mucilage of Comfry roots two ounces, the flower of Fænugreek seed one ounce, Honey two ounces, Salt two drams, Oyl of Myrtles or Mastick two ounces*: Bruise them for a Cataplasm.

A Cautery also or Vesicatory applied on the part doth powerfully dissolve, and calls forth the moisture, with which the Joynts being possest, are easily Luxated.

Some write that the juyce of Prim-roses given by the Mouth, doth help in Luxations.

The Cure of Immobility by fault of the Organ.

If an Organical fault do cause Immobility, and it be from the Birth, it is incurable, because we cannot fashion the parts otherwise; but if it be from an adventitious

titious cauſe, the Tendons being too much Relaxt, and Lengthened, by ſome force or humor, the ſame Topick means wil do good, as in the ſaid Palſie, eſpecially the flegmatick one. But if they being too much bound, that a flatulent Spaſm be cauſed, the Cure hath been explained in Winds: but if there be a true Contraction and laſting, the ſame Cure as that for Drineſs wil be convenient as hath been ſaid.

CHAP. III.

Concerning Depraved Motion.

The Kinds,

WE call that Depraved motion, when Voluntary Motions eſpecially, are exerciſed either Immoderately, or unſeaſonably, or otherwiſe undecently; as it comes to paſs when the Members that perform thoſe Motions are Reſtleſs or Cramped, or Tremble, or Beat, or are Shaken by a Rigor, or are Extended by reaching and yawning, or otherwiſe moved by twinkling.

Reſtleſſneſs | The Members are ſaid to be Reſtleſs when they are acted too much, and reſt not, as when men beſides themſelves, mad men, and phrenitical, do exerciſe ſuch various and violent motions, and angry, furious folks do things ſo headlongly, but chiefly thoſe who labor of that diſeaſe called *Vitus* his Dance, do tire their Feet with Running and Jumping beyond meaſure, of whom we have ſpoken in an Alienation of the mind. Thoſe alſo that lie by it, in other Diſeaſes both Waking and Sleeping are ſomtimes very unquiet, and it is properly called Inquietude, and he that is ſick of it, is called *Aſſidui*, it is a Symptom of many Diſeaſes, that overthrows the ſtrength, with which they that are affected, ſomtimes toſs their body variouſly hither and thither, whence they have called it jactation, and ſome Jectigation, ſometimes they often raiſe themſelves up, ſometimes continually exerciſe their hands and feet, retract them, change them. Somtimes they rowl to the Feet, which in acute Diſeaſes (with which this is a familiar accident) *Hippocrates* reckons it amongſt the deadly ſigns; in the healthful alſo ſuch like reſtleſſneſs is wont to be troubleſome both to them Waking and Sleeping whether alſo may be referd that unſeaſonable Night-walking in Dreams of which hath been ſpoken in Watching.

A Convulſion. | The Members are ſaid to be convelled, when they exerciſe thoſe inordinate Motions, as hath been ſaid in a general Convulſion or Epilepſie, and it happens alſo in a particular Spaſm, eſpecially in that Species, in which the Members are yet agitated, and their motion is not yet ſtopt, they being attracted by a Convulſion, as in that called a Convulſive Palpitation, hath been ſhown in a particular Cramp.

A Trembling. | The Members are ſaid to tremble, when they are ſtirred upwards or downwards with an inequal motion, and it is called Trembling, which then is cauſed chiefly, when we would uſe them, which ſometimes tremble more ſomtimes leſs, which often happens in the Hands when ſomwhat is to be laid hold on: and ſometimes in the Feet which tremble as they ſtand: and ſometimes in the Head, which continually is moved hither and thither: ſomtimes the lower Jaw becomes tremulous, the which often happens before Vomiting which it preſageth, we have ſeen a Citizen of ours Tremble in all the parts together even from his birth unto his old age, with his Arms, Hands, Fingers, Feet, with which he danced as it were while he went, with his head alſo which he ſhaked, and with his Jaw with which he chewed as it were.

A Palpitation. | The Members are ſaid to beat or pant, not when they are ſhaken, being about to do ſomthing, as in a trembling, but when they are ſomwhat attracted involuntarily, and are again relaxt as in Convulſive Palpitation, we have formerly ſaid, it doth come to paſs after the ſame manner, which Palpitation may be referred to that Species which they call the flatulent Spaſm, having almoſt the ſame cauſe, as ſhal be ſaid, and therefore it may be called a flatulent Palpitation, yet more gently exerciſing the Members rather than ſtrongly drawing them, as the other doth; ſeeing the Members are properly ſaid to palpitate, when the Muſcles and the Skin over them are ſomwhat lifted up, and ſink again, and that with pain for the moſt Part and trouble, the Members in the interim not being attracted or very little.

A Rigor | We ſay the Members are ſhaken by a Rigor, when there is a certain Convulſion of the whol body, or of its parts, almoſt as it befalls thoſe that tremble, but with a certain ſenſe of cold and involuntarily, whence it is called a Rigor, as in the beginning of the Fits of intermitting Feavers, the whole body by this means is extended, bowed, ſhaken, oftentimes ſo ſtrongly, that the Teeth knocking together make a Noiſe, which they call the Gnaſhing of the Teeth and continual Feavers alſo do invade with the like Rigor, and ſomtimes when a Criſis is at hand, it is a foreteller of it: at other times the Agitation is lighter and then it is called *Horror.* | Horror or ſhivering in which a greater ſenſe of cold runs through the body, and the hairs ſtand upright and the pores bound up make the Skin rough: and ſomtimes Cold only doth moleſt a man as hath been ſaid in Feavers: but alſo out of Diſeaſes a Rigor or Horror, like unto theſe doth ſomwhat ſhake the Body from External cold, Fear, and ſometimes a Rigor ariſeth from external Cauſes without Cold.

Reaching. | In that called Reaching, the Arms eſpecially with the back are very much extended, and bowed with a vehement opening or drawing aſunder of the Mouth *Gaping.* | which they call Gaping, the which alſo may be cauſed apart; theſe two if they trouble often without occaſion, do preſage Diſeaſes or are Prefaces to the Fits of Feavers beginning: but otherwiſe out of Diſeaſes they are ſigns of ſloth, or they ariſe from ſome Imagination as ſhal be ſaid.

Nyctation | We call that Nyctation when the Eyes are forced to twinkle, that is the Eyelids fall down, and they are coverd with them and can hardly be kept open, as it happens in the ſlothful when they are full and heavy to ſleep, ſomtimes alſo it happens in Diſeaſes.

The Cauſes.

The Cauſes of theſe Kinds of Depraved motion, may be various, in the Brain, Nerves, Muſcles, and Mem-

Members: either an agitation of the Spirits, a Perturbation, or Irritation, Distension, Weakness.

A perturbation of the Mind, is the cause of restlesness.

The Spirits stirred by the affections of the Mind do cause a heat in the Brain, or being troubled by a Mixture of Humors, Vapors, by Alienating the Mind, and offering divers imaginations, do cause that they are so unquier, and do attempt and perform divers things, as hath been explained in an Alienation of the Mind.

An Irritation of the Nerves, is the Cause of a Convulsion.

An Irritation made in the Nerves, which way it causeth that the Body is convelled, or Exagitated with inordinate motions, hath been said in a convulsion. But from Irritation and trouble also, other Motions are diversly forced according to the diversity of the cause, that they are made too much, or not righly. For the said restlesness is oft caused from heat, not only because it promotes actions, and brings them into act, or causes a raving in the Brain heated, but when the whol Body boyles with it in Feavers, and because it makes a great trouble, it makes the Body unquiet,

Heat the cause of restlesness.

and it is a Symptom of the feaverish, especially of the continual, continent,

Pain the cause

burning; and then also of the intermitting when in the fit an exceeding heat doth chiefly afflict, as shall be shown in Feavers. The Body offended with some other grievous pain, and afflicted with it as with an enemy, can subsist or rest in no place, and in driving away and mitigating it, it doth reinforce all its actions: from Acrid, Cholerick or Salt, or Putrid humors, passing through the sensible parts, and the flesh of the Muscles, and as it were pricking and Irritating them, because their Expulsive faculty endeavors to repel the trouble, that concussion of the Body is caused in the said rigor or shaking fit as this doth happen in the begining of Feavers from the like matter exhaling and passing through the Body. And upon that account first of all, Retchings and Gapings do follow, and by and by horrors or rigors. Somtimes also that they do manifest themselves before a Crisis, hath been said in Feavers, in other Evacuations in which the like acrid Excrements are cast forth, as in making water, stooling, sweating, a rigor or horror, doth somwhat shake either the whol Body, or certain parts, whiles they are a doing; the which also is wont oftimes to fall out, before these Evacuations are made, and to presage them at hand, Nature being now stirred up to attempt them. As some horror in a Crisis and out of it, somtimes is a foreteller of sweats at hand: and the lower Jaw for the most part is wont to tremble before vomiting, and as it were to sollicite the Mouth to a voluntary opening, the natural faculty so forcing it.

Breathy Vapors the cause of reaching.

From Breathy Vapors, as they call them, collected in the Spaces of the Muscles, solliciting nature to Excretion, rather by their plenty then by a vehement Acrimony, that Motion of distension of the Limbs or Pandiculation also doth proceed: because in that, the Muscles which are chiefly possest with them, being bound up to drive them forth, do so draw the Members; and that especially, because then a wearines being joyned to, either Spontaneous, which ariseth from the plenty of these Excrements collected about the Muscles, or that proceeding from labor, from which also there is a congestion of Halituous vapors about the Muscles, by this constriction of the Muscles in Pandiculation, not only because then the Vapors are driven forth they are somwhat refresht from their Wearines, but also because the Muscles being relaxt by too much and long continued motion, and when they rest feeling that Wearines, when they are bound up again, they do less feel the Wearines, as hath been formerly said that one Wearines is cured by another, they acquire some ease of their labors by reaching and therefore in wearines they are invited to exercise it, and being invited are forced. And this is the cause, that commonly reaching doth accompany the natural wearines and sluggishnes before sleep, till the Body afterwards rightly resting by sleep, be freed from the wearines, and after sleep also so long, til that which remains of the Halituous Vapor, be expelled, by yet extending the Body. And because in a Spontaneous wearines going before Diseases, both by reason of the plenty of Vapors, and this wearines of the Body that also doth manifest it self; as the same wearines and plenty of Vapors doth cause that drawing a sunder of the Mouth and blowing forth, in the said gaping, the Muscles of the Breast, and lower Jaw, and Cheeks working together and as it were consenting to the endeavor of the rest of the Muscles, if gaping be joyned with reaching, or these Muscles acting severally, to mitigate their wearines and discuss the Vapors, gaping ariseth. The which also ariseth from the Immagination, if one see another gaping, or think of it, being so invited as it were to do the like; yet more easily in the sloathful, and drowsie, or those disposed, then in others. And the same cause also depending on the wearines of the Muscles that move the Eyes and Eylids, and on the Vapors collected about them, doth breed the same twinkling of the Eyes, which is not only coupled somtimes with reaching and gaping in the sloathful, but also ariseth by it self alwaies, when sleep invites. And that because by reason of the continual Motion of the Eyes they are alwaies made weary, and because the shutting of the Eyes, which this heavines of the Eyes doth so much force, that they remain shut also in those that sleep, is necessary for the righter taking of Sleep.

The Immagination, is the cause of gaping.

From the said Halituous vapors, but thicker and more plentiful, collected in the habit of the Body and running up and down to seek a passage out, the said Palpitation is caused; which if they break forth under the Skin, and wander between that and the Membranes of the Muscles under it, here and there lifting up the Skin in some one or more places, and variously changing their place, they cause there an apparent Palpitation, somtimes with a sense of pain. But if they run under the Muscles and their spaces, and be unquiet they cause that the Members be also somwhat attracted, yet not strongly or lastingly as we have said it was done in that called a *Flatulent Spasm*, but only by intervals then when the wind gathering it self as it were into one place doth force the Muscles alluring the part, but by and by letting it alone, the wind flying back again and giving place. So that if this Agitation of the Members be from this cause, as hath been said, it may deservedly be called *a milder Species of a Flatulent Convulsion*, or *a Flatulent Palpitation*, as that which is caused by the Irritation of the Nerves, as hath been declared in a Convulsive Palpitation. The causes of which Flatulent Palpitation also whether they be Wind or Vapors, have no other original, then that which hath been propounded in a Flatulent Spasm.

Halituous vapors, the Cause of Palpitation.

That

That weakneſs of the Muſcles by reaſon of which, their action doth not wholly ceaſe, but only cannot be be ſufficiently performed, doth not cauſe a total Impotency to move, but only an impaired one, manifeſting it ſelf depravedly and with trembling, and that becauſe whiles the Muſcle doth endeavor to lift up the Member, and it cannot keep it ſo long, by reaſon of its weakneſs, that ſliding back indeed by a natural Motion by reaſon of gravity, but the Muſcle drawing it back again upwards by a voluntary Motion, by this intercourſe, and as it were contention of Motion amongſt themſelves, the Member ſtirred upward and downwards, ariſeth that called a trembling: which will be ſo much the greater if the Member which it ought to move, be heavy, or do not follow, and the Muſcle alſo be in ſome ſort involuntarily ſtirred up to move; where we obſerve in ſome, although their Member reſt, yet they tremble.

The defect of the Animal ſpirit is the cauſe of trembling.

But this their weakneſs happens ſomtimes by reaſon of the defect of the Animal ſpirit, not abſolute, as in a Palſie, but only ſuch a one, by which the ſenſe of Feeling is yet indeed communicated but there is not ſufficient force miniſtred to the Muſcles to move, becauſe a greater portion of it is required to Motion then to the ſenſe of Feeling: which ſomtimes happens when they are ſpent, whence ariſeth a laſting trembling; and that either by reaſon of Age, whence old Folks become Tremulous, or by reaſon of a grievous and long continued Diſeaſe, after which they oftentimes tremble a long while; or of immoderate Evacuation eſpecially by Venery, ſhedding of blood, purging and great labors; but otherwiſe the ſpirits being only diſſipated they tremble til they return; as by a vehement affect of the Mind, or ſuddain, in Fear, Anger, Joy, they tremble for a while: and in ſtrong or ſwift Motion, as when they carry heavy burthens, or do ſomwhat elſe which is above ſtrength they tremble: and when having ſuſferd grievous labors, they reſt, the Members being too much wearied do tremble for a time; alſo the Spirits being hinderd, yet not wholly intercepted, as in a Palſie, whence a perfect reſolution of the Muſcle follows, but only in part, the weakneſs which ariſeth in the Muſcle cauſing a trembling, which even then is, as it were a certain Diminute Palſie, ſprung from the ſame cauſes affecting the Nerve, as in a Palſie, yet not ſo powerfully, and eſpecially proceeding from Excrementitious humors, poſſeſſing the Nerves: but other affects

A hurt of the Nerve, is the cauſe of trembling.

of the Nerves alſo do induce a trembling, not by intercepting, the ſpirits, but by weakning or hurting the Nerves another way; as if from Excrementitious humors, as hath been ſaid, this weakneſs in the Muſcle doth cauſe a trembling, not only by intercepting the Spirits, but alſo by irritating the Nerve doth ſomtimes force it to the motion which is made in trembling, whence alſo the cauſe being increaſed, or laſting, the trembling oftimes ends in a convulſion. And if the Nerves alſo, by Narcoticks too much or often taken, do at length contract that weakneſs from that Stupidity, that alſo the Muſcles by reaſon of them be weakend, a trembling alſo is bred from this affect of them; as it hath befallen ſome, not only by the uſe of Opium or of other ſtrong ones, but from a Suffumigation of Henbane, and we obſerve that by the Narcotick vertue of Wine, they who are given to drunkenneſs, do at length become Tremulous, the which notwithſtanding they perſwade themſelves doth proceed from the drinking of cold Water, which drunkards drink in the morning to quench their thirſt cauſed by Wine, that they may not be compelled to abſtain from Wine. Which ſuſpition of theirs is augmented alſo by this, that whiles they are yet faſting and ſober, they tremble, and after they are heated again with Wine, the trembling ceaſeth, or at leaſt waies ſhews it ſelf leſs, the which yet doth not happen, as if Wine were not the cauſe of this trembling, but becauſe whiles the Wine increaſing the heat of the Body renders its actions lively, that as long as it is hot with Wine, and as it were refreſht, it doth leſs feel the weakneſs which otherwiſe alwaies remains, for that reaſon, as thoſe refreſht with meat and Wine, being made ſtronger, is the cauſe that they tremble leſs.

After the ſame manner trembling is ſomtimes bread from other Poyſonous things being taken and applied, chiefly beſetting the Nerves, as it is ſomtimes wont to happen from the Suffumigation of quick-ſilver (not from the touch, as ſome would have it) to Gold-ſmiths in gilding their Veſſels, if they have not a care of themſelves, but draw it in; for which cauſe alſo in the French Pox thoſe ſuffumigated with Cinnabar, eſpecially if then alſo they drink Wine, by which the Nerves being already made feeble, are eaſily hurt, do oftentimes fall into a trembling, the which alſo oftimes befals them, who in the ſame Diſeaſe being anointed with quick-ſilver do thence get a trembling, which hurts of the Nerves proceeding from quick-ſilver, either proceed from its Antipathy with the Nerves, or from ſome other propriety of it, almoſt proper to it, by which it moving the Humors driving them to the Jawes it moves plenciful ſpitting, and driving them to the ſuperficies and extremities of the Body, it alſo affects the Nerves, and ſo much the worſe, if the Humors which are moved be evil, and be not decently purged by ſweats, by which alſo if the Nerves ſuffer more vehemently, after tremblings they ſuffer Convulſions which often follow theſe cures made by the uſe of quick-ſilver. There may be ſome fault in the Nerves from the Birth, whence ſome are born trembling, as hath been formerly ſhewed by the example of one; but what trembling that was, can hardly be explained becauſe though trembling, he nevertheleſs performed his Duties for a long courſe of life, and married a Wife.

The Cure.

We will divide the Cure according to the diverſity of the Kinds, and we will explain in every one what is to be done.

The Cure of a Convulſion.

What muſt be done both in a general and particular Convulſion, hath been taught in Convulſions; in that alſo called a Convulſive Palpitation, in as much as this threatens true Convulſions we muſt ſtudy to prevent it by Application of the ſame Remedies, but by reaſon of its motion, ſeeing it is not very urgent, nothing peculiar is applied to the members.

The Cure of reſtleſſneſs from trouble of mind.

In Reſtleſſneſs, if that ſpring from a perturbation of the mind, what then muſt be done in reſpect of the Diſeaſe and alſo of this Symptom, by reaſon of which, how it ought to be quieted with Dormitives and be reſtrained by uſing of force, hath been explained in an Alienation of the Mind.

The Cure of reſtleſſneſs by reaſon of Pain.

If they be reſtleſs by reaſon of Pain, then ſmoothing the pain with Anodines and things enducing ſleep, and if it urge more vehemently cauſing a Stupidity, together with the Pain, we correct the Reſtleſſneſs.

But if the Reſtleſſnes ariſe by reaſon of the Heat, not only of the Heart and Brain, but alſo of the whol Body in Feavers, then this Symptom becauſe it dejects the ſtrength, draws the Cure to it ſelf; the which yet is uſed no otherwiſe, than that which is wont to be applied to Feavers in quenching that burning, except that here the ſtrength of the Remedies muſt be increaſed and upon that account when the Cure urgeth, we attempt a more plentiful Evacuation and diverſion of the Blood, unleſs ſomwhat hinder, or we reiterate it: alſo we increaſe the quality of Coolers both with Internal and Exter-

The Cure of Reſtleſſneſs by reaſon of by reaſon of heat.

nal Remedies, and thoſe things which may augment the Heat we take away, as too much cloathing, and the roomes being ſhut up, we open them, and chiefly in reſpect of the Symptom, by rubbing the body diverting from the Nerves the vapors which do cauſe or increaſe the the reſtleſſneſs, and afterward lenifying it with anoynting the Back-bone, with Oyl of Violets, ſweet Almonds &c. we correct that toſſing of the body: the which alſo is done if we admoniſh the ſick, that they weaken not themſelves with too much motion, or hinder Sweats by making themſelves bare, and that we may ſomwhat quiet them, we may procure Sleep.

In Trembling we muſt proceed according to the Nature of the Cauſe, and if they tremble from ſome Paſſion of the Mind, or by reaſon of Labor above their ſtrength, thoſe ceaſing, the Trembling alſo ceaſeth.

The Cure of Trembling from defect of Spirits.

But if the Spirits being diſſipated or waſted by reaſon of old Age or Venery and other profuſe Evacuations, or it follow after grievous diſeaſes, 'tis eaſie to repair the ſtrength diſſipated, but very hard that which is loſt: the which yet muſt be tried by that called a Reſtorative Cure, which is chiefly accompliſht, by a fit and moderate ſleep, by moderate and ſeaſonable exerciſe, the which wil profit more, if the Trembling were induced by vehement labor, if it be gently undertaken, than altogether idleneſs; by a cheerful Mind, or if the Trembling remaineth, from ſome paſſion of Mind, it is corrected by the contrary paſſion of the Mind, by a cleer temperate Air, pure and ſweet, by nouriſhments of good juyce and wel nouriſhing, alſo by things that repair the ſpirits and increaſe the heat, as Wine, which moderately taken doth ſo refreſh, that it doth correct the Trembling cauſed by Wine, by its refreſhing, if it be taken as hath been ſaid.

The Cure of Trembling from an affect of the Nerves.

But if it proceed from a Diſeaſe of the Nerves and is as it were an imperfect or dimunite Palſie and it be from the Birth, or otherwiſe from a grievous diſeaſe, it ſomtimes is incurable. But if it proceed from an Excrementitious humor poſſeſſing the Nerves, no other method of Cure is applied for the curing of this diſeaſe, then what was ſpoken of in a Palſie, and is applied to other diſeaſes of the Brain and Nerves, ingendred from excrements, amongſt which alſo is a Convulſion, which if they would uſe timely, and continue in it, doubtleſs they would be ſooner cured than the paralytick, but becauſe they neglect it, unleſs the trembling be very much, or are content with a few things, it comes to paſs that the Trembling doth not only not ceaſe, but old age comming on, it is increaſed.

As therefore it hath been ſaid in a Palſie, ſo here alſo we muſt proceed, and the body firſt of all muſt be generally purged, and that, if the evil perſiſt, muſt be repeated at certain times, and particular Evacuations and Diverſions muſt be ordered, & the ſame altering things muſt be drank, and the like muſt be outwardly applied, and Baths muſt be ordered, if it yeild not to other things; and we muſt chiefly take heed, that the trembling hands be not expoſed to the cold, or waſhed with cold water, inſtead of which they may be waſhed with Decoction of Sage, Lavender flowers, and the like, amongſt which Lotions they teach that if the parts be waſht in the morning with Piſs, it doth very much, help.

If the Trembling have its original from Poyſon thoſe *Alexipharmaca* which reſiſt this muſt be uſed; and if this be from the uſe of Quick-ſilver, which more frequently comes to paſs, they give Treacle or Cordial Medicines, with which they mix the filings of Gold, ſeeing they ſay that Gold hath ſuch an affinity with Quick-ſilver, that if it be in the body, and Gold be drank, that ſo draws it with it that afterwards voided by the ſtool, it is found pure in the Excrements ſticking to the Gold, which affinity of theirs they have taken from that, that in gilding, Gold can be faſtned to no Metral but by the intervention of Quick-ſilver.

At this day the Electuary of *Orvietanus* is chiefly commended for a ſingular Remedy in this caſe of which kind if this following be not, yet it may ſupply its room. As, Take *of the roots of Gentian, Biſtort, Carline, Tormentil, white Dittander, Aromatick cane, round Birthwort, Wolfsbane, the herb bleſſed Thiſtle, the ſeeds of Vipers Bugloſs, Alkanet, Citron each one ounce; make them* all into a *fine Pouder*, to which add *the roots of Vipers graſs pondered the weight of them all, of Honey clarified,* with a ſufficient quantity *of generous Wine three times as much,* and towards the latter end of boyling, mix of the beſt *Treacle one pound and an half,* keep it for uſe, the Doſe is from *half a dram* to *a dram.*

There are ſome who have taught that they can draw Quick-ſilver out of the body by Sweats, that it ſhall ſtick plainly to the Skin like Sand, and afterwards being waſht with water ſhal appear ſhining, by this means, if every other day in a Stove ſuffumigating the body one day with the Wine of the Decoction of Sage and Wormwood poured forth on red Bricks, but the other day with Frankincenſe caſt upon the Coles, they draw forth Sweat, and as often as they go out of the Bath they muſt rub their body with *Aqua vitæ* diſtilled with Balm, and continue it for twelve or fourteen daies: afterwards let them anoynt themſelves ſix daies with Oyl of Turky, Millet and Foxes til as they ſay, the aforeſaid Sand doth ſtick to the Skin, but we who profeſs that Quick-ſilver in ſubſtance, cannot paſs the body neither by its Suffumigations nor anoyntings, as no other Medicines alſo, but that they attempt what they perform, by their vertues only carried thither we do judg this opinion of the Vulgar and of ſome Phyſitians to be falſe, although it be very much imprinted in the minds of men, and Deceivers privately conveighing quick-ſilver in a Plaſter, confirm it in the vulgar: and in the like caſe, we adviſe that Gold-ſmiths whiles they gild, do ſit out of the houſe in the open Air, as for the moſt part they are wont to do, that the Wind may drive the ſmoak from them; and if there be need of quick-ſilver in the Cure, we give order that it be fitly and moderately adminiſtred; yet if a trembling ariſe from thence, we adviſe the ſame Remedies eſpecially the Topical mentioned in a Palſie, which help the Nerves rather by ſtrengthening and ſomwhat binding as *Rondeletius* wil have it, than by affecting them with an eminent heat. And we waſh the trembling parts with the Decoctions before quoted.

If the trembling ariſe from Narcoticks, and their force

force causes it; how it must be broken hath been said in a Numness: but if the Trembling remain, the same Topicks shal be tried which by strengthening do heat also, not because the Nerves are cooled by Narcoticks, as they think, but because when they are stupid, they are stirred up by heat. But if Drunkeness with Wine hath caused a trembling, either it ceaseth of its own accord, if it be not accustomary, but if Drunkenness hath been already a long while continued, the Trembling arising thence is hardly any more taken away, especially when Drunkards have contracted so perverse a habit, that unless they fil themselves again with Wine and are heated by it, as hath been said in the Causes, they are troubled more with the Trembling, yet in the interim they may mend this perverse kind by Temperance and Sobriety of life, also the Remedies that strengthen the Nerve wil do good both given and applied.

The Cure of a Rigor from acrid Humors.

In that called a Rigor if it be gentle, or only a Horror, seeing it doth not much trouble, or continue long, we need not take pains to correct it, and also if it be vehement seeing Nature by that in the beginning of Feavers, doth endeavor to expel the hurtful matter, neither is it then easily to be curbed, or Natures Motion to be hindred, as neither if it go before a Crisis, seeing *Hippocrates* saith, a Rigor coming upon a Burning Feaver, its dissolved.

But if it so trouble the body, together with a troublesome sense of Cold, that the sick suffers it with a great deal of trouble, and are weakned by it, then 'tis rather to be mitigated, then wholly to be hindered, seeing this cannot be done without dammage, and the Rigor being wholly taken away, the course of the whol Feaver is stopt, or is caused, that it is not decently, so that though those Remedies which suffer not the Rigor to break forth, are beleeved to cure a Feaver, yet by retarding it they do rather cause, that afterwards it follows worse, or is changed into more grievous accidents; unless perhaps that unprofitable Rigor persist rather from custom than the Morbifick cause which is already taken away, for then also it must be wholly prevented, as these things have been largely explained in Feavers.

Also by what means the Fit of the whol Feaver may be hindred with the Rigor hath been likewise taught in Feavers, but for Mitigation of it the things following wil suffice,

If the body be somwhat actually heated, for whiles we provide against cold, also the Rigor is appeased; which is with less hurt done in the Feet, heating them with Cloaths or other waies, as with warm water in a Brass Vessel, or with Stones or Tiles heated and wrapt in a cloth.

Diverting the matter by Frictions and Ligatures of the extream parts, we amend the Rigor.

That is chiefly performed by anoynting the Back-bone with fatty heating Oyls and proper to the Nerves. As, Take *of Oyl of Chamomel, Dill, St. Johns wort, each half an ounce; anoynt it*, first besprinkling the hands with *Aqua vitæ*.

Or after this manner. Take *of the flowers of Chamomel, St. Johns wort, the Leaves of Southernwood dried, poudered, each two drams; Pellitory of Spain one dram*, pour as much *Oyl of Nuts* as to cover them, *Aqua vitæ two drams*; boyl them, strain it, and anoynt the Back-bone.

Or of Juyces and Oyls. Take *the juyce of Mugwort, Southernwood, each half an ounce; Oyl of Dill, Rue each one ounce; Aqua vitæ two drams, Saffron half a scruple*, boyl them a little, make an Oyntment.

Many mix Treacle with *Aqua vitæ* and Oyls and anoynt the Back-bone, others if the Cold be great mix Spices.

The Oyntment of Spiders explained in Feavers, as also other things expresst there do the same also, with which also the soals of the feet are rubbed.

There are some who approve of Baths, if the Feaverish heat hinder not, and the Rigor lie highly hurtful, of the Decoction of Pennyroyal, Calamint, Rue, Southernwood, Mugwort, and the flowers of Chamomel, and Melilot.

The Cure of reaching & yawning from halituous Vapors.

In Reaching and Yawning, seeing these can bring no dammage, but rather do good, there wil be no need of any Cure there, unless in as much as, if these together with a Spontaneous weariness do as signs foretel Diseases, they do admonish us to apply Remedies that we may prevent them.

If from Yawning the lower Jaw be easily luxated, we advise that they do somwhat repress it, and gape not with such a wide mouth, as also in reaching, because it is uncivil too much to extend the Members, we teach them somwhat to restrain their limbs, for Civilities sake, rather than any benefit,

CHAP. IV.

Of the Defect of Breathing.

The Kinds.

IT is called a Defect of Breathing, when it is either abolisht, or is done with difficulty, which may happen both to natural Breathing and to voluntary or vocal breathing forth in utterring the Voice and Speech.

Breathing abolisht in a Syncope.

The Breathing which is continually performed by vertue of the Heart, naturally by drawing in and sending out of the Breath, can no waies perseveringly be wholly abolisht, while the man lives, but for a time it may altogether cease, in a true Syncope, and in that which accompanies that which we call strangling of the Womb, in which cases as long as, the mind faileth in them, as they call it, or the Life, or rather the vital motion, so long no breath at all is perceived in them, or it is so obscure that we can observe no breathing forth of the Air even with a Feathers laid to the Nostrils, or shaddow of motion in a Cup ful of Water laid on their Breast, but they lie like dead folks without all motion and sense.

But Breathing oftentimes proceeds difficultly, when they fetch it with great labour and impediment; and if this be with high streining, so that they are in the beginning of Suffocation, it is called Suffocation and strangling, the which also wil follow, if it did not cease: In which danger because they are more conversant when they lie down, to turn that away they are forced to breath upright with their Breast raised up and their Neck straight, and then they are called *Orthopneumatical*, and because if they move their body they, they are more grieved, their Breathing being made swifter, they are compeld to be quiet: but otherwise they Breath with less anguish, yet difficultly also, and it is simply called a *Dispnœa*. Somtimes labouring more do send forth the Breath, somtimes to draw it in, at other times both being hindred together.

But

A strangling from things external. But a *Dyspnœa* or *Strangling*, do diversly offer themselves, for sometimes it is bred and shews it self, some manifest cause concuring, from which also it is, as shall be said in the causes.

A suffocating Catarrh. Sometimes difficulty of Breathing hath a Catarrh its companion, in which also sometimes they are suffocated, all Breathing being suddainly intercepted, and this evil is called a *Præfocating*, or *suffocating Catarrhe*.

Ofttimes it is coupled with affects of the Breast, with a Cough, Wheezing, in that called an *Asthma*, in which they fetch their breath often with difficulty, as if they were wearied with too much Motion, whence they are called *Shortbreathed* and *Suspirious*, and they Cough, but spit forth nothing mattery, and sometimes in their Lungs there is heard a certain Piping, or Wheezing, and this evil assails them either continually, or upon a slight cause, and it returnes and hath its Exacerbations, and it is of long continuance, and stubborn.

A Quinsie. A *Dyspnœa* is sometimes joyned with a difficulty of swallowing, and there is a pain or trouble both in the Jaws and Neck, especially in that called a *Quinsie* or *Cynanche*, because by reason of their breathing hinderd, they gape like Dogs with their Mouth open, which affect sometimes a Feaver doth accompany.

Suffocation and a Dyspnœa in an Apoplexy, Palsie, Spasm. At other times also the breathing labors highly, with a resolution of the whol Body in the Apoplectical, and the sick are choaked, as hath been said there: and then a *Dyspnœa* is sometimes joyned with a Palsie or some Species of Spasm, as hath been said there, that then when they would breath forth strongly, which is required to the uttering a great voice, and being forced to Laugh, Weep, call out, or to Cough they are compeld to breath forth powerfully, the which because they cannot do for the causes there expreſt, they fall into danger of Suffocation.

The cause of the defect of Speech and Voice. Affects of the Womb, sometimes go before that Species called the *Suffocation*, or *Strangulation*, or *Præfocation of the Womb*, with which being suddainly seazed, sometimes the breathing being wholly taken away, at other times very much hinderd, they are so tormented, as if their Jawes were tyed with a bond, and those thus affected, then they call *Hysterical*.

A Dyspnœa in the faults of the natural Parts. A swelling, distension of the Belly, are also with a *Dyspnœa* in the faults of the natural parts. But especially in the *Hydropical*, to whom it is very troublesome, so that they are forced to breath upright, like to the *Orthropneumatical*, and lying down they are in danger of Choaking.

The Night Mare. There is also a certain Nocturnal suffocation, that befals those that Sleep, called *Pnigalion*, or the *Night-Mare*, because they think and Dream that they are suffocated by some thing lying upon them and pressing them, and afterwards waking, they think that they have sufferd that from an Enemy, or Witch, or Devil, and that they were invaded and oppreſt by them, whence they call it *Ephialtes*, and Doating, for a time they do somwhat perswade themselves so.

The Voice, or Vocal breating, which at our pleasure we can wholly omit, yet not make, unless there be a breathing forth, can no waies be long abolisht by reason of Respiration, because that cannot long cease; Yet it happens that it is utterd obscurely by reason of that, if the breathing be very final: but more commonly it happens in a *Dyspnœa*, that the Voice cannot be utterd very clear and loud: but sending forth of the breath not being hinderd, the Voice nevertheless cannot sometimes be expreſt by us, or at other times also can only be brought forth silently and lowly; both which sometimes happen in a Palsie, other Motions also being then hurt together, as hath been explained there: but at other times without this the Voice is lost for a time, and returnes again, as I remember an excellent Physitian *Theodorus Zungerus*, my God-father and Colleague, when we were in the School of my Father *Thomas Platerus*, that was Maister to us both, hath ofttimes been so Stupified, that he could not answer one word, though asked with threatning, and hath so returned home mute and astonisht, his sences otherwise entire, which Species they call *Apolepsie* and *Hippocrates* an *Aphony*, some would refer it to the Species of a Catalepsie, sometimes also when the Voice is lost, or weak, there is felt a pain in the Jawes, a Tumor, or some other fault, and sometimes it is apparent.

The defect of the Voice in a Dyspnœa. *In a Palsie.* *An Aphony.* *A defect of the Voice with a pain of the jawes.*

A defect of Speech the Voice failing. Speech, or an Articulate voice may be intermitted at our desire or will, but we cannot speak, unless there be a vocal Respiration, and therefore by reason of the defect of the voice, as hath been already said, the Speech is either abolisht, or not sufficiently utterd, but also sometime they cannot speak without an Impediment of the Voice, and they are called *Dumb*, in a Palsie either peculiar to the Tongue, or common also to other parts; sometimes they are both Damb and Deaf from their Birth; but oftentimes when they cannot exactly expreſs certain Syllables or letters, those especially which that they may be pronounced, do require a various doubling of the Tongue, as in R. and S. to be pronounced with a noise or hissing, they Stutter and are called *Blæsi*, or *Lispers*, the which also happens with some faults of the Lips, or Teeth, or Jawes.

Dumb. *Deaf and Dumb, Stuttering.*

The Causes.

A Suffocation by reason of the Brain in an Apoplexy. Every cause of breathing taken away or diminisht, of the Voice and Speech how these do fail in an Apoplexy, all the sences being taken away, by reason of the Brain affected, and in an Epilepsie also, hath been explained in the Consternation of the Mind.

Breathing abolisht in a Syncope by reason of the heart. For which reason as long as the Motion of the Heart ceaseth, so long also Respiration may cease, seeing then there will be no need of it, but if that be hinderd, the Motion of the Heart not first ceasing, that a man must needs die, we will shew in a Syncope.

But if these fail without a Disease of the principal parts, of the Brain and Heart, this comes to pass by reason of the Nerves that carry the vertue, or of the moving Muscles, or of other Instruments that effect and help Motion.

By

An affect of the Nerves of the Toung is the cause that sometimes they are Deaf and Dumb.

By occasion of the Nerves affected, that the Speech, Voice, and Breathing may be weakened, hath been formerly explained in the Impotency of motion, their Muscle being then palsied, or contracted, by the causes declared there, that the Speech sometimes may be particularly abolisht, the third conjugation being affected, which makes the Nerve of the Tongue, and if the hurt be great, especially a fault of conformation from the Birth, that then the Hearing is commonly taken away too by reason of its Communication with the said branch. And that the same also comes to pass, if the branches of the Nerves of the sixth and seventh conjugation called the Recurrent Nerves, folding with the Muscles of the Tongue do suffer. And if this be in the branches of the same Recurrent Nerves that infold the Larynx that the Voice doth then also cease, the dissections of Anatomists do manifestly declare, who for experience sake, have in a Hog taken the recurent Nerves in a band: which Aphony by reason of the recurrent Nerves arising from internal causes seldom happens particularly to the Voyce, and if it be, it proceeds either only from some thick vapor, as they would have it, or only from a Defluxion fallen down thither, but this fault more commonly happens to the Voice and Speech in a Palsie, from the causes mentioned, together also with other Impotencies of motion, to which also that Impediment of Breathing which in uttering of a strong voyce we have said did offer it self, as in Crying out, Laughing, Howling, Coughing, Snezing is somtimes added, if the other Intercostal branches infolding the Muscle be affected too; for Breathing alone seldom suffers a Defect, singly without other hurts, by reason of the Nerves; seeing the Midriff whose motion is sufficient for moderate Breathing, hath received Nerves, as hath been explained there, not only from the said Conjugation of Nerves, but also from the Spinal Marrow great Nerves on both sides, proceeding from its first pairs joyned together, and descending to the Midriff, for which cause it doth not fall out that the Breathing ceaseth, unless both the Spinal Marrow, and the Conjugations or paires of the Nerves be hurt together, which can scarce be but about their beginning in the Brain, as hath been said in an Apoplexy, as neither can it be hinder'd in a Palsie unless the hurt befalling both, the Paires and Conjugations of the Nerves and reaching also the Nerves of the Midriff, doth prejudice many motions. yet it also comes to pass, that especially the greater Nerves of the Midriff proceeding from the Spinal Marrow, singly and soly troubled with defluxions or other Diseases may breed a certain Dyspnæa, such as we have observed in the Asthmatical continually molesting the sick, no other signs appearing of the Lungs affected.

An affect of the recurrent Nerves is the cause of the defect of of Speech and Voice.

An affect of the Nerves of the sixth and seventh Conjugation is the cause of a Dispnœa with a Palsie.

The Nerves of the Midriff troubled with a Defluxion do cause an occult Asthma.

By reason of the Muscles, Natural and Vocal breathing faileth, as the Speech if the Muscles moving the Tongue (for we shal treat afterwards of the faults of the Tongue, as it is an Instrument that is moved) the Voice if the Muscle of the Larynx being troubled with Defluxions cannot do their office, they by moving the Tongue, these by dilating and straitenning the cleft of the Larynx for diversly shaping the Voyce. Or if this happen from an Inflammation of them, or some other Tumor hindering their Function.

An affect of the Muscles of the Tongue is the cause of the Defect of Speech.

Of the Muscles, of the defect of the Voice.

But the defect of Natural Breathing sometimes happens by reason of a Disease of the Muscles that constitute and move the Breast, neither doth Breathing suffer dammage only when we would make a strong breathing forth, which these Muscles do chiefly perform, but also if the cause be great, Natural drawing in the breath is also hindered, and that commonly from a Defluxion falling down upon the Muscles of the breast and the Intercostal, whence oftentimes follows a great streightness of the Breast, with pain, the which also comes to pass, if these Muscles be bruised or inflamed, whence Swellings and pains shew themselves outwardly, and if this happens to the Muscles of the belly which also do move the breast and press forth the Excrements, they can no longer exercise that vehement endeavor, which is required by holding the breath and pressing these Muscles in the casting forth of Excrements.

A Disease of the muscles of the breast is the cause of a Dispnœa.

The Midriff since it is the principal Organ of Natural breathing, if it be hurt not only by consent of its Nerves as hath been formerly declared, but by it self, then it is the chief cause of breathing hurt. But this comes to pass especially, if the Defluxion which fals down on its Nerves, or slides into the intercostal Muscles doth reach also to the Midriff, whence we have seen some vehemently tormented. But if it be assaulted by other Diseases, the motion of the Midriff is rather depraved, than weakned, as we shal explain there: although it may also come to pass, that the Midriff, because it lurks free in the inner parts, exposed every where to the internal heat, being dried and bound up in a Burning Feaver, upon that account a Dyspnœa may arise, which oftentimes fals out in these Feavers: but its motion is more commonly hindred, if it be molested, by Vapors, Wind, Humors, or the Neigboring Bowels.

The Midriff affected by it self is the cause of a Dyspnœa.

And by consent.

Vapors raised in the lower Belly of a manifest quantity or quality, or malignant and poysonous, and being gathered about this transverse space or Midriff, and stopping there some time, until they are carried further, and hindering its free motion, which is required in breathing, by divers waies, especially if they be plentiful, sometimes induce a Dyspnæa, sometimes fear of choaking and other accidents moreover: both because the Midriff hath a great consent with the heart by reason of the Pericardium, and with the Brain, because it is a nervous part and hath eminent Nerves, whence it comes to pass that if it be troubled, it doth not only hinder breathing, but also accidents of the Heart and Brain do follow, and so much the more, if furthermore the vapors from it do reach also to these principal parts, the which if there be a malignant or poysonous quality in them, may easily come to pass, as also these are wont at other times to prejudice these parts, the Midriff not being offended, as we have said in the hurt of internal senses and shal shew in the affects of the Heart, the which accidents yet do presently cease the Vapors being repeld, or otherwise discust and dissipated, or flying back, by the motion of the Midriff: unless by the continual arrival of the cause, the Midriff be

ſo moleſted or infected, that either ſome permanent Diſeaſe doth follow, or moſt grievous accidents of the Functions of the mind do enſue, which are wont to be hurt by the fault of the Midrif (as that being inflamed we ſee a Phrenſie doth follow, whence they have called the Midriff, *Phrenes*, that is, the Mind) as the Falling-ſickneſs, Madneſs, and at laſt the Brain being long and much ſmitten, an Apoplexy, which evils theſe Symptoms of Suffocations invading oftentimes by fits, are wont to foregoe and foretel.

But that ſuch like Vapors are for the moſt part raiſed up from the Veins, as from crude, impure, bad, and Malignant blood, yet not putrefied (otherwiſe a Feaver would be cauſed) hath been ſhown in a Madneſs and an Epilepſie, for as there, diverſly here and there in the Body, ſuch vapors being raiſed, from blood collected in the branches of the Vena Porta and Cava moleſting the Brain do produce the forementioned accidents, ſo alſo in the lower Belly cheifly, being collected as in a ſink of Excrementitious blood, and abundantly in great plenty flying upwards to the Midrif and moleſting that, either they create Suffocation only, or other diſcommodities moreover.

Vapors from the Meſaraick Veins affecting the Midrif, the Cauſe of a Night-Mare.

But from the Meſaraick Veins eſpecially the greater diſperſed every where about the Heart to the Bowels, and in which by reaſon of the many Excrements of the firſt Concoction, impure blood is eaſily collected, ſuch like Vapors ſomtimes ariſing, and ſtopping about the Midrif, they produce a Suffocation which they call the night Mare, which invades rather in the night then when Concoction ought to be made, becauſe at that time, the evil Vapors collected, therefore the moſt part are wont, by the acceſſion of Crudities, to be increaſed and moved, and to be carried upwards, and by reaſon of lying down to torment the more. Whence in their Dreams feeling theſe ſtreits they Dream of divers cauſes whence they proceed, and being often raiſed up, if the Mind moreover be ſomwhat affected with them, they remain in the ſame perſwaſion, and though they being raiſed and ſet upright, the Vapors being then diſcuſt the evil ceaſeth, yet often returning, if the Fewel of the evil remains, at laſt it threatens and brings more grievous accidents to the Brain, as hath been ſaid. The cauſe of which evil certainly depends upon an ill courſe of Diet and that a long time continued, as in other affects ſprung alſo from Vapors there, eſpecially in Hypochondriacal Melancholly and Intermitting Feavers, as hath been ſhown in them. This is therefore an accuſtomary affect to Children, and thoſe of ripe Age, who do ſooner and longer offend in their Dyet.

Vapors from the Veins of the Womb affecting the Midrif, are the cauſe of the Suffocation of the Womb.

In the Female ſex this more commonly proceeds from the Veins of the Womb, in the ſtrangulation of the Womb therefore ſo called: which when being derived from the branches of the *Vena Cava*, and many of them and great ones do creep along the Womb and its Membranes, if the filth of the blood doth ſtop in them, which from the whol Maſs of it, is wont to be purged thither, in impure Bodies, that at the ſet time it may be emptied by the Courſes. Which is wont to come to paſs more commonly in the unmarried by a ſtoppage of the Courſes, not ſo eaſily in the married by reaſon of Copulation, and the Vapors from thence aſſail the Midrif: they produce divers kinds of Suffocations of the Womb as they prejudice the Midrif and the neighboring parts or thoſe that conſent with it, and as the plenty and nature of thoſe Vapors is diverſe. For if it hurt only the Midrif either it breeds only a *Dyſpnœa*, if the plenty or offenſe be leſs, or if it be greater, it breed only an Agony of Suffocation; but if that, it alſo brings hurt to the Stomach, that is continued to the Midrif, then with a *Dyſpnœa* and Compreſſion of the orifice of the Stomach which they call the heart, Nauſeouſneſs, Vomiting, a Vertigo, and pain of the Head being cauſed by conſent, the Hyſterical accidents do ſhew themſelves. Which paſſions are wont to happen in great bellied Women at the firſt Month, the young one being not yet increaſed, nor able to conſume the blood that is retained, eſpecially if it be impure, from which alſo they take a ſign that they are with Child. Hyſterical Women are far more grievouſly affected, if theſe Vapors eſpecially the Poyſenous being communicated to the Heart too, by reaſon of its communion as it hath been ſaid, do alſo bring dammage. In which ſpecies the Motion of the Heart wholly ceaſing, all breathing alſo ceaſeth, and as it were ſeazed on by a Syncope the Virgins fall by degrees to the ground, and are held in that fit, ſome a ſhort time, others the ſpace of an hour, before they come to themſelves. But at other times the Midrif by reaſon of the conſent which it hath with the Brain, as hath been ſaid, or both together affected with theſe Vapors, with the ſaid ſtrangulation of the Womb, that called the Madneſs of the Womb, or Convulſive Motions, and other hurts of the Brain offended, do manifeſt themſelves.

All which alſo may be varied, not only by reaſon of the parts affected, but alſo if a Poyſenous cauſe be joyned, according to the divers Nature of the Poyſon, by which they are wont chiefly to beſet this or that part, as we have expounded in other diſeaſes of the Womb, that vitious blood breathing forth ſuch like Vapors is generated from divers cauſes, and collected about the Womb. Amongſt which they have beleeved that the ſeed retained and corrupted is not the leaſt cauſe in Virgins with whom this affect is familiar, the which yet can ſcarce be, as long as it is contained in its proper Veſſels. and if poured out of them, it be retained, it rather produces an Eroſion of that part, then ſuch accidents, as we ſhall explain elſewhere.

Wind hindering the Midrif, is the cauſe of a Dyſpnœa.

Winds filling the Capacity of the Belly, becauſe they diſtend that, as alſo the Midrif which ſhuts up the upper parts of it, they cauſe a *Dyſpnœa*: which alſo the puffings up with Wind of the Stomach and Cholick Gut that lies under the Stomach do effect, by reaſon of the neerneſs and Adherency with the Midrif, and they know that they proceed from thence, by the murmuring and diſtenſion of that place, but that they write that they would no waies have a Night-Mare to be cauſed by the ſame Winds or thick Vapors, the far more grievous evils which do then fall out, and follow from thence, do ſufficiently declare.

A Humor poſſeſſing the Midrif, is the cauſe of a Dyſpnœa.

A watery Humor alſo diſtending the Belly and drawing a ſunder the lower Ribs of the Breaſt, extending the Midrif doth breed a difficulty of breathing, in an aſcites Dropſie, as ſhall be declared in a Dropſie. But the Humor which is collected in the Cavity of the Breaſt doth cauſe a *Dyſpnœa* rather by hindering the Lungs then the Breaſt, as we ſhall ſhew in the Lungs.

The Bowels hindring the Midrif, are the cauſe of a Dyſpnœa.

The Bowels lying under the Midrif, and growing to it, or hanging by it, if they acquire too

great

great a bulk, drawing down the Midrif with their weight, do not suffer it to be moved freely, or in those that lie down, lying upon it, they hinder it by pressing it, as when the Liver, Spleen, being obstructed, hardned and increased into a bulk in the Hydropical do cause that high difficulty of breathing, which oftentimes doth discover a Dropsie a long time before a Tumor doth appear, with which they are molested lying down, and therefore are compelled to sit upright; the swelling of the Belly also increasing it, as hath already been said.

A *Dyspnœa* also may happen from the Stomach too much filled with meat, which vexeth so long till the things taken are digested, or are returned by Vomit, or are eased by belching. The which when it succeeds not, and the Repletion is great, they may be Suffocated; which as it may happen from the quantity of things heaped in, so from the quality of certain meats, as of Mushrums, which are wont to Suffocate.

The Instruments by which breathing, the Voice and Speech are performed or governed, are the Cavities of the Mouth, Nostrils and Jaws, containing the Air for the performance of all three, the parts placed in the Mouth for the uttering an Articulate Voice or Speech by their Motion are the Tongue, or by tuning, are the Palate and the Teeth, the passage or pipe carried from the Jawes to the Lunges, that makes the Voice and serves for breathing in drawing down the Air, is the rough Artery, or Wind-pipe, the Bowels, or Bellows receiving and sending forth the Air by a Natural Motion for breathing, is the Lungs; the Breast doing the same by a voluntary Motion with the Lungs to which it applies it self.

The stoppage of the Mouth and Nostrils, the Cause of Suffocation.

By reason of the Largness of the Mouth. Nostrils and Jawes, these defects happen, if the Mouth and Nostrils together be stopt up by external Bodies or by water, or otherwise the Teeth being bound together, that the Mouth cannot be opened, the Nostrils in the interim being stopt up with Snivel, upon which account somtimes the Apoplectical and Epileptical are in danger of Suffocation, especially because otherwise breathing is made obscurely in them, but if that the Nostrils only be stopt with Snivel or other things, because they may draw breath with their open Mouth, then breathing is only somwhat hindered, when the Air cannot be sufficiently let in, or rather because then tis fetcht quick, it is depraved and an uncomely voice is uttered.

The narrowness of the jawes stopt, is the Cause of Suffocation.

The hinder largeness of the Jaws being likewise stopt, the same comes to pass, especially about its narrowness in which even the least thing that sticks, makes work: and that especially if the passage into the Wind-pipe and Gullet being possest by a Tumor arising in the incompassing coat, or in the Muscles of the Jaws and Larynx or in the Glandules, or Palate, or by the Palate fallen down, be obstructed: Or if the Vertebræ of the Neck being Luxated inwardly (which is most commonly in the first Vertebræ, which is loosly joynted with the Head and by reason of the weight of the Head sustains great Motions) These passages be strained, especially if then the Nerves also and rough Artery be prest; from which accidents they can neither sufficiently breath, or utter a voice, or speak, or swallow. Somtimes also a pain being joyned, as we shall explain these things in a quinsie. A Species of which also it is said to be, if it be from a Vertebræ Luxated, and in the other painful Diseases of the Jaws.

A drinesss of the Tongue, is the cause of Stammering.

By occasion of the Tongue, the Speech suffers a defect, if that as it is a Musculous Instrument (for, of the other hurts of its Muscles we have already spoke) it be too much dried and hardned from the causes explained in the hurt of Tasting. For because then in the pronouncing of certain Letters it cannot be sufficiently rowled, (the which that they may be plainly expresst do require a more various doubling of it) whiles they shape their words they stammer. The which also happens from a Tumor arising under it, or if it swel or be inflamed, or otherwise if from the birth it have too great a bulk, which oftentimes is so great, that they cannot speak at all.

The Tongue too much increased is the Cause of hindering the Speech.

A little Tongue the cause of defect of Speech.

A familiar fault with some Fools who from their birth are born Fools and Dumb, as hath been said in an Alienation of the Mind; the which also happens if it be framed too smal, or if it be cut off, or maimed, by a punishment, or some other chance, and in Convulsions the Tongue being strongly laid hold on and bit of by the Teeth; the same also comes to pass by

The bond under the Tongue tied up, the cause of the defect of Speech.

reason of that bond by which it is knit, if that be too strait bound up, and not sufficiently loosed in Children new born, so that it hinders the free Motion of the Tongue.

The want of the Palate, is the Cause of the want of Speech.

The Palate seeing it is the quil of the Voice, if that be wanting or mained, it doth prejudice the voice; as also when the former Teeth are wanting, because they ought to resist the Motion of the Tongue in the pronuntiation of certain Letters, and that in the want of them cannot be done, they Stammer a little.

The want of Teeth the cause of stammering.

By reason of the Diseases of the rough Artery or Wezand, which is the Pipe through which natural and vocal Respiration is uttered, the breathing, Voice, and Speech do fail, for if the chink of the Head of it, called the *Larynx*, be too much bound, which happens by occasion of the Membrane in which that is cut, when it is dried and wrinkled more then is fit, by the cold Air, or cold Water, or the use of astringent things, then a smal or hoarse Voice is uttered. Which impediment also of the Voice happens from a thick slime long sticking there, for if it be wholly obstructed with that, or some other Body slipt in, or drawn in with the breath, and continuing there long, the which yet seldom happens, because it is forced to give place, by the Cough, which it suddainly moves unless by reason of its sharpness the thing sticking there be fastned into it, it must needs be that the Patient be suffocated. As Histories testifie that *Pope Adrian* died by a Fly flying into his Throat, and we have observed a Child strangled by Swallowing a Gold Noble. And what they suffer also, in whom water by chance flowes down into this Wind-dore of the rough Artery, and what straits it breeds, and how with great violence a Cough doth cast it thence through the Mouth and largenss of the Nostrils, we often see in others, and somtimes we try it in our selves. But the chink of the *Larynx* scarce labors of any other Disease, unless when by consent it is hindered or prest by the neighboring parts, as from the Vertebræ of the Neck

The binding, or stopping of the chink of the Larynx, is the Cause of the defect of the Voice.

Luxated,

Luxated, of which hath been ſpoken already: For it can ſcarcely happen that it be relaxt more than is fit, by a Humor, ſeeing it is convenient for it alwaies to be moiſt: that it ſhould be torn, ſeeing it is a thick Membrane, is impoſſible, as alſo it is very hard to be wounded.

The binding of the pipe of the rough Artery is the cauſe of Suffocation.

The paſſage of the rough Artery or Wind-pipe, from the Head even to the Lungs, if it be intercepted by outward force the Neck being bound up as ſhal be ſaid in the Gullet, it brings ſtrangling, and if it be preſt by the firſt Vertebræ of the Neck luxated, it cauſeth difficulty of breathing, which *Hippocrates* called the ſixth ſort of Squinzy. The rough Artery can ſcarce be filled otherwiſe, with things that fall into it, but as I ſaid breathing may be ſtopped about the ſides thereof. And they that are drowned, are not choaked ſo much by the Influx of Water as by the hinderance of the paſſage of the Air. And if any thing fal into the paſſage and hinder breathing, it is by its ſticking faſt and cauſing a continual Cough.

The Cauſe of Diſpnœa or difficulty of breathing is the connexion of the Lungs with the Breaſt.

The connexion and Obſtruction of the Lungs are the Diſeaſes that cauſe a Dyſpnœa. The connexion of the Lungs with the Convex part of the breaſt being ſtreighter than it ſhould be, ſuffers them not to move freely, and makes them ſhort-winded in motion. This by Anatomies hath been found to have been natural to ſome, and to others from a fall or Pleuriſie.

The Obſtruction of the Lungs cauſeth an Aſthma.

When the Lungs are ſtopped inwardly in the branches of the rough Artery that are diſperſed through them, there is a difficulty of breathing, becauſe the Air cannot freely paſs. This comes often from a watry humor falling from the Head, in time of ſleep and lying down, without ſenſe by degrees, through the rough Artery to the Lungs; which ſtaying in the narrow branches thereof, and growing ſlimy and ſtopping the paſſage, it cauſeth breathing with Snorting and noiſe and a Cough. And if by reaſon of the toughneſs thereof it cannot be hawked forth, it cauſeth a long Diſeaſe called Aſthma: which by a new defluxion, at night time and in moiſt weather, and after a Surfet, is not violent. And if the defluxion be great and ſuddenly fill the paſſages that were formerly ſtopped, it cauſeth the Suffocating Catarrh. The ſame may come from the Excrements of the Lungs there long detained and made thick. For as the Brain by reaſon of the plenty of Blood, which filleth the Cavity of the membranes, being crude, continually gathereth Excrements; ſo the Lungs whoſe veſſels are ful of blood if it be excrementitious or crude, it cauſeth many excrements: ſo that it is not neceſſary that all the flegm which is ſpet up muſt come from the Head to the Lungs. Both theſe Cauſes are diſcovered by the flegmatick conſtitution of the body, and the ſigns of abounding flegm, and rattling, and other hurts mentioned. A white chalky matter, and hard, is made rather of the Lungs, than of flegm which is ſlimy like Bird-lime, but not crumbling. This obſtructing inwardly the branches, cauſeth that long Aſthma wherein there is no ſign of flegm. And the ſame may cauſe the Stone in the Lungs, which is hard, brittle, ſmooth or rough, according as the veſſels are, as we have ſeen Anatomies. And ſuch have been coughed out after a long and otherwiſe incurable Aſthma, which were the cauſe thereof.

The Compreſſion of the Breaſt is the cauſe of difficult breathing.

The Diſeaſes that hinder the Breathing beſides the Muſcles of the Breaſt mentioned in thoſe which hinder the motion both of the Lungs and Breaſt both which are required to breathing. This is when it is outwardly compreſſed, or when aſtringent things are laid thereon, as common Phyſitians ſuppoſe.

The hardneſs of the griſtles of the breaſt is the cauſe of Dyſpnœa.

If the Griſtles of the Ribs, which are about the Breaſt to cauſe the more eaſie motion, be turned into a hard ſubſtance like the other Ribs: which happens in ſome through age, in ſome ſooner, eſpecially in Women, by reaſon of their Breaſts held up thereby; for then the breaſt cannot be ſufficiently dilated: And this makes them ſigh, when they have great breaſts and lie upon their backs.

The Ribs thruſt inward cauſeth difficult breath.

When a Rib or two are broken and thruſt inward, becauſe they hinder the dilatation of the Lungs, and the motion of the breaſt they hinder breathing: And ſo do the Ribs diſlocated, and the Vertebræ or ſpondits of the back bent inwards. Theſe two hurts as they may come by an external force to the Ribs: ſo *Pernelius* teſtifieth that a Rib hath been broken by great palpitation of the body: which I rather beleeve might be diſplaced.

The Repletion of the Cavity of the Breaſt is the cauſe of Dyſpnœa.

If the Cavity of the Breaſt be filled with matter in an *Empyema* and Corruption of the Lungs, or Water in a Dropſie; Or Blood from a Vein broken: If theſe be in great quantity, they cauſe a Dyſpnœa by hindering motion of the Lungs, Breaſt and Midriff. Alſo Wind may cauſe the ſame if in the Breaſt: as I gathered from one in a Dyſpnœa who had a noiſe about his breaſt with no rattling.

The Cure.

The Cure of want of breath in Swooning.

If Breath be ſtopped from Fainting of the Heart, when ſtrength returneth, they recover. And what muſt be done in Swooning ſhal be ſhewed in the defect of ſtrength.

The Cure of Defect of breathing from an Apoplexy.

If men in Apoplexies from a diſtemper of the Brain are in danger of Suffocation, we ſhewed what muſt be done in the Conſternation of mind. Alſo when breath is ſtopped by Convulſions.

The Cure of want of Breathing & Speech in a Palſie & Cramp and other Diſeaſes of the Nerves.

If there be Defect of Breath, Voyce, or Speech by reaſon of the Nerves in a particular Palſie or Convulſion, it muſt be cured as a Palſie or Convulſion.

If it come from the Cramp you muſt give things to prevent a general Convulſion, as was there ſhewed.

And if it come from Looſneſs of the Nerves you muſt proceed as in a Palſie, by purging and altering.

When the Speech or Voyce is loſt, things applied to the Mouth and Throat are beſt, becauſe they draw forth flegm by the right way, and being neer the part affected, conſume and alter the humor. Maſticatories and Gargariſms are moſt proper, not ſuch as draw flegm thither, as in the Palſie of other parts, but which dry and draw out the humor that is fallen thither.

This

This Masticatory is good. Take *Nutmeg two drams, Long Pepper, Cubebs, Galangal, Water-cresse seeds, Mustard seed, each one dram; Salt, Gum Elemi, each half a dram; Mastick one dram and an half; Turpentine* which is highly commended, and with *Wax* make *Pills*, add *half a scruple of Castor.*

These Pils are excellent to be held all night under the Tongue. Take *Bayberries one dram, Castor and Euphorbium each six grains*; with the *Infusion* of *Gum-tragath* made in *Rose water*, make *Pils.*

It is admirable to rub the Tongue with Mithridate and Castor. And to wash the mouth with Brine, or a Decoction of red Wine, Sage, and Salt.

Or this. Take *Acorus roots one ounce, Galangal, Cypress, Costus, Nutmeg, each half an ounce; Sage, Marjoram, each one handful*; boyl them in *Water* and *Wine*, and add *Honey of Rosemary flowers*, make a *Gargarism.*

Black-Cherry water to wash the mouth and to drink is vulgarly admired in loss of Speech, but this is better. Take *Black-Cherry water, Lavender, Sage, and Pennyroyal water, each equal parts*; Anoynt the mouth often.

Some have written it as a secret that the juyce of Nettles put into the Ears, restoreth the Speech.

The same external medicines are to be used as in the Palsie. And the Oyntments and things which are applied to the original of the Nerves, are to be applied to the nape of the Neck, and let the Jaws be anoynted therewith.

Sinapisms, Dropaces, Vesicatories and Cauteries which draw back are to be applied to the hinder part of the Head.

If there be plethory it is good to let blood under the Tongue in the Palsie thereof upon the same side and to apply Cupping-Glasses under the Chin and the hinder part of the Head.

It is good to bid them use the Tongue and endeavor to speak.

The Cure of want of Breathing.

If Voyce, Speech or Breathing be hindered 'tis a Desluxion upon the Muscles, which distendeth and inflameth them; whether it be in the narrow Muscles of the Jaws or of the breast, or upon the Diaphragma, it shal be spoken of in Pains and Desluxions.

But if it come from the Diaphragma which is so troubled with Vapors that Nocturnal Suffocation or Fits of the Mother follow, then because this Symptom is most urgent, The Cure shal be as followeth.

The Cure of Incubus *or Night-mare.*

If a Vapor arise from the *Precordia* and hinders the Midriff in the Sleep, and brings danger of choaking, as in the *Incubus* it is dangerous, for fat folks and Children. Otherwise if it continues, it sends the Vapors to the Brain, and causeth worse accidents as Hypochondriack Melancholly, or Madness, or Falling-sickness, for the cause is the same only the part affected differreth; and if the brain be much hurt it may turn to an Apoplexy.

Therefore it is good to prevent it betimes, and the Crudity and Cacochymie and Repletion in the first passages is to be taken away. And the Vapors are to be kept from rising to hurt the Diaphragma or other parts either in the Fit or out of the Fit, and to be diverted and discussed, as we shewed in the Melancholy, Epilepsie, Catalepsie, and the like Diseases from the same cause.

This is done first by purging the thick Excrements by Clysters or otherwise, and then letting blood if it be much or impure. Then clense the Cacochymy by vomit and purge; as the humor is, especially with things against Melancholy, and Wind, that are good for the Head and Falling-sickness. Then use particular Evacuations, provoke the Hæmrhoids or Courses if they be stopped, and purge the Excrements of the Brain by the Nose. And in the mean while to make a good Concoction, give & apply things to the Stomach, avoid Crudities and things breeding Excrements and Wind. Look to the Head, for the Imagination is hurt, and to the Heart by reason of Fear, and to the Breast for it is troubled. All these must be respected out of the Fit. In the Fit use Clysters, and then outward Applications, that draw down vapors, and these may be continued after for prevention of the Fit.

If you give no Clyster, use this. Take *Diacatholicon six drams, Diasenna Solutiva one dram*, give them alone or in *Wormwood Water.*

Pils. Take *Species Hiera of* Galen, *half a dram, Aggregative one scruple*, with Syrup of *Stœchas* make *Pills.*

The Humor is prepared thus. Take *Syrup of Hyssop* (for the Head and Breast) *Stœchas and Lavender, Honey or Rosemary of Bugloss each one ounce; Oxymel simple half an ounce, Wormwood, Mints, Succory, Bugloss and Peony water, each three ounces*; give it for three or four times with *Nutmeg.*

Or thus. Take *Fennel, Asparagus and Liquorish roots, each one ounce; Peony roots and Capar bark, each half an ounce; Betony, Hyssop, each one handful; Endive, Succory, Bugloss, Agrimony, Hops, each half an handful; Bugloss flowers one pugil, Raisons stoned one ounce, Annise and Fennel seed each two drams; Dodder one dram, Schœnanth one dram*, boyl them to a pint, strain it, and dissolve *Oxymel two ounces, Sugar one ounce, Diarrhodon Abbatis one dram, for four Doses.*

In Crudities, Infuse in *Wine, Fennel roots two ounces, Capar barks half an ounce, Galangal three drams, Wormwood, Germander, Groundpine, each three drams; Cordial flowers each two drams; Fennel and Parsley seed, each one dram.*

Then purge. Take *Liquorish half an ounce, Raisons one ounce, Anise seed two drams and an half; Cordial flowers one pugil, Epithymum, Senna, each half an ounce*; boyl them and add to the straining *Rhubarb one dram, barks of black Helebore prepared half a dram* (if the Patient be strong, or increase the quantity of Senna) *Ginger, Grains of Paradice, each half a scruple*; strain it, and give it with half an ounce of *Syrup of Roses.*

Or give other Potions with Diasenna, or Pils of Cochy &c.

Evacuate at divers times by the former; or by Magistral Syrups, Electuaries, &c. mentioned in Melancholy Diseases.

Let these Pils be in readiness. Take *Species Hieræ Archigenis one dram, Black Hellebore prepared one scruple, Agarick, Rhubarb, each half a dram, Epithimum half a dram, Peony seeds and roots each half a dram*; with *Honey of Squils* make a *Mass*: let him take three or four or more bigger or less as they work. Let him use them often fasting some hours before Dinner or Supper.

Hiera Archigenis alone wil do the same.

Spare Diet, and avoiding Suppers is excellent; especially if it come from Surfets. Let him beware of crude and windy things that stretch forth the Belly and increaseth shortness of Breath. Let the Diet be of good juyce, and easie Concoction, with warm Spices. For Drink, Wine is forbidden because it disturbs the mind, and Water because it puffeth up, and Mead is allowed, but in young people by reason of the Honey which turneth into choler, it is not so good. We allow Wine moderated with Water, as in other melancholly Diseases.

A Honey-water for old men that are flegmatick. Take *Liquorish one ounce, Fennel half an ounce, Raisons stoned two ounces, Annise seed one dram, Bugloss flowers one*

pugil, boyl them to one pint and an half, and Diſſolve Sugar, *and Honey, of each two ounces*: Boyl them again a little and ſtrain them.

The Wormwood wine mentioned to prepare, is good alſo to ſtrengthen, taken in the mornings.

Pouders after meat to help Concoction, and hinder Vapors.

As, Take *Coriander ſeed prepared half an ounce, Aniſe-ſeed two drams, Pouder of Aromaticum Roſatum one dram, Diamargaritum frigidum one ſcruple, Cinnamon half a dram Mace one ſcruple, Piony ſeeds and Coral, each half a dram; Sugar of Roſes, as much as all the reſt*: give one ſpoonful after Meat.

Or this mixture after Meat. Take *the Marmalad of Quinces, candied Citron peels, Conſerve of Roſes, each half an ounce; Conſerve of Marjoram half an ounce, Aromaticum Roſatum, Diamoſchu dulce, Diamargariton, each one ſcruple; Piony ſeeds half a dram, red Coral one dram, Sugar of Roſes, as much as is ſufficient*, give one ſpoonful.

The Lozenges of Aromaticum Roſatum, Diarrhodon, or Diamoſchun, are good taken at bed time.

Or this Electuary. Take *Conſerve of Roſes, Borrage, Marjoram, each one ounce and an half; Citron peels, Myrobalans, and Ginger candied, each half an ounce; Elicampane and Galangal, each half a dram; Piony-ſeeds one dram, Coral, Ivory, each one dram and an half; Diarrhodon, Dianthos, each half a dram; Cordial Spices one ſcruple, with Syrup of Bettony*, make an Electuary. Let him drink after it a little Wine, with the Water of Lillies Convallies.

Old Treacle is good once in a week taken at Midnight.

We give Clyſters before Purging to prepare, and after to expel wind, and looſen the Belly. And in the time of the Fit. Of which you have Examples in the like Diſeaſes.

Purgers of the Head by the Noſe and Mouth after general purging to prevent other Diſeaſes of the Head muſt be uſed.

Apply Caps and Pillows to the Head of theſe. Take *Cypreſs roots, Angelica, each two drams; Marjoram, Roſemary, Lavender flowers and Roſes, each one dram; Coriander ſeeds one dram and an half, Cloves half a dram*: make a Pouder.

Baggs are applied in the fit to the Heart and Pulſes, ſprinkled with Wine, Balm-water, Roſe and Orange-flower-water. Take *Galangal, Cypreſs, Citron peels, each two drams; Citron and Baſil ſeeds, each one dram; Balme and Cordial flowers, each half a dram; Cloves one ſcruple*: make a Pouder.

Let the Stomach and Breaſt be anointed in the Fit. Take *Oyl of Dill and Chamomil, each one ounce; white Wine one ounce, Aqua vitæ two drams*: boyl them till the wine be ſpent.

Often waſhing externally doth revel Vapors from the Head and Midrif.

Alſo Frictions from beneath till they come to the Head, and combing of the Head backwards, are good.

Let Cupping-glaſſes be applied to the Thighs, and then to the Shoulders,

A Dropax made of Pitch and Oyl of Maſtick muſt be applied hot to the Head with a Clout between; if the Head be afflicted.

In Plethorick and Cacochymical Bodies, a vein muſt be opened on that ſide, which is moſt heavy, firſt in the Arm, then in the Foot, and in other parts, for revulſion of Blood from that part, to which the Vapors moſt aſcend.

They muſt be wakened in the Fit, and not diſturbed in Mind.

Let them ſleep with the Head high upon one ſide, and take heed of ſleeping upon the Back, becauſe it doth not onely cauſe Straightneſs, but troubleſome Dreams.

The cure of the Suffocation of the Womb.

If the Vapors be about the Womb, and cauſe Hyſterical accidents, becauſe there are divers kinds thereof, one produceth a pain of the Heart, another Swounding, another raging, another convulſive Motions with Suffocation, of which is ſpoken in thoſe Diſeaſes, yet ſince the Spirits are hindered in all, and they are all called Suffocations of the womb we ſhall ſpeak of them.

They are in moſt danger who fetch no breath, but ly like dead people, becauſe ſometimes they die in the Fit, and ſometimes return to themſelves. Alſo if they have raging madneſs or Convulſion. But often they recover after theſe.

The Method of Cure is, to evacuate the Excrements about the Womb, provoke the Courſes, and to repreſs the Vapors that riſe from the womb, and to revel, diſcuſs and conſume them, divers wayes, among which ſome take away the fit.

We give Evacuations, as in foul Blood and Melancholy according to the Conſtitution, and Humors abounding, which muſt be repeated, if the Diſeaſe ceaſe not, alwayes adding things that provoke the Termes. Theſe are beſt.

To provoke Vomit, give one dram and an half of Agarick, with Oxymel.

Let the Potion following be given every week to purge. Take *Agarick in Pouder, and Tripera magna without Opium, each one dram*; diſſolve them *in white Wine and Water of Mugwort, or Mother-wort.*

Or thus. Take *Agarick, Briony roots, each one dram and an half; Ginger and Cinnamon, each half a dram*; infuſe them *in the beſt white Wine*, ſtrain them, and add *Syrup of Mugwort one ounce.*

Turpentine is much commended, and this Purge. Take *Agarick trochiſ'd two ſcruples, Ginger, one ſcruple*, infuſe them *in white Wine*, ſtrain them, adding *Turpentine three drams, diſſolved in ſix drams of Honey, and the Yolk of an Egg.*

Uſual Pills. Take *Hiera Colocynthidos one dram, Agarick trochis'd one dram and an half, Carrot, Agnus Caſtus ſeeds, each one ſcruple; Myrrh, Caſtor, each half a ſcruple; Diagredium half a ſcruple, with Turpentine* make a Maſs for Pills, give from half a dram.

The Food muſt be moderate and good, and becauſe Wine cauſeth the fit, let him drink Aniſe-ſeed boyled in Water or Mead.

Medicines to alter muſt diſcuſs Vapors, and move the Terms, ſtrengthen the womb, and the principal Parts, and reſiſt the venemous Humors. Thus,

A good Water. Take *Balm and Mint-water, each one ounce and an half; Cinnamon-water two ounces, with a little Caſtor, or diſtil one of theſe Simples following, with a little Caſtor.*

Or make this Decoction of them. Take *Roots of Solomons Seal, Valerian, each one dram and an half; Balme, Penny-royal, Organ, Calaminta, Jet, each one dram*; boyl them *in Wine*, adding *Vinegar of Squills*, ſtrain it, and ad *Syrup of Mugwort half an ounce for two Draughts.*

Or this Syrup. Take *Roots of Solomons Seal, Briony, Valerian, Spignel, Coltsfoot, white Wine, Maſter-wort, Angelica, each half an ounce; Plantane, Balm, Penny-royal, Mints, Calaminta, Fleabane, Nep, Bettony, Mugwort, Thyme, each one handful; Roſemary, Lavender flowers, each one pugil; Seeds of Cumanin, Carrots, wild Parſnips, Sorrel, Piony, Aniſe, each one dram; Bay-berries, each two drams*; boyl and ſtrain them, add *Juyce of Plantane one ounce and an half, Sugar ſix ounces*, boyl them thick, and add

add *Cinnamon and Cloves, each one dram and an half*; give one ounce by it self, or with convenient Liquor.

A Potion. Take *Mithridate one dram and an half, Pouder of Moschus dulcis half a dram, Syrup of Mugwort half an ounce, Balm-water* as much as is sufficient, with a little Cinnamon-water, make a Potion.

Pouders to drink with Liquors, with Sugars, or to be taken in Lozenges or Electuaries.

One easie made. Take *Cummin seeds one dram, Juniper-berries eleven*, pouder them, give it *in Wine or Cinnamon, or Plantane, or Rose-water.*

Or thus. Take *Cummin seed, wild Parsnip and Carrot seed, each one scruple; Cloves half a scruple.*

Or, Take *Cummin, wild Carrot seed, each one dram; Gith, Agnus castus, Rue, Piony, Dittany roots, each two scruples; Amber, Crystal, Jet, each one scruple; Cloves, Cinnamon, Pepper, wood Aloes, each half a scruple; Musk five grains*: make a Pouder, give *a dram in Liquor, or with four ounces of Sugar* make *a Tragema, or Lozenges, or with Honey, or Syrup of Mugwort an Electuary.*

Pills of stinking things are made thus. Take *Castor one scruple, Assa fœtida half a scruple, Myrrh, Galbanum, Sagapenum, each one scruple, with Honey of Squills*, make *Pills, take half a dram.*

Or of very sweet things thus. Take *Musk six grains, Benzoin half a dram, Sugar one dram, with Cinnamon-water* make *Pills, give half a scruple.*

Suppositories revel Vapors. Take *Honey one ounce and an half*, boyl it to a consistence, add *Hiera, Cummin, and Nigella seeds, each one scruple; Sal Gem. half a scruple*, make Suppositories.

A Clyster doth the same. Take *Bay and Juniper-berryes, each one ounce; Penny-royal, Calaminta, Rue, Savine, each one handful; Cummin two drams*: boyl them, and dissolve *Hiera Coloquintidos two drams, Oyl of Wall-flowers and Rue, each one ounce; Salt one dram*, make a Clyster.

Provoke vomiting with the finger, or a feather in the Throat.

Put pouder of Mustard into the Nose in the fit to provoke Neesing, or a little white Hellebore therewith, some blow up Rhubarb with good success, if she sneese it is good, by which we perceive life.

Strong Scents are applied to the Nose that stink, in the Fit, which drive down the Womb being sensible thereof, as some suppose. But we think they do good by dispersing vapors, and stir up strength in the Heart and Brain, whether they pierced being subtile, and because they stir up the expulsive Faculty which was a sleep, that they may come to themselves; therefore we bid them smell such out of the fit. Castor because it is strong, is good to smell too.

Also Assa fœtida, Galbanum, Opoponax, Bitumen and the like; Trefoyl that stinketh, Petroleum, Rue, and Chimches, both Domestick, and in Plants, which stink moist horridly.

Also Onions, and Garlick which have a piercing sharp Scent.

Also strong Vinegar in a spunge, or mixed with Castor and Sulphur to anoint the Nose.

A stinking Fume is better, of burnt Feathers, Leather, horn Hooses, Candles ends put forth.

Or these Troches. Take *Castor one scruple, Assa fœtida half a scruple, Pitch half a dram, with Turpentine make Troches*; light one, and take in the vapors at the Nose with a Funnel, but not too thick, least it suffocate.

To the womb pleasant things are applied to fetch it down by delight: but we suppose that they do it by piercing being hot, and so discuss the vapors sooner.

A Fume for the womb with a funnel. Take *Storax, Benzoin, of each one dram; wood Aloes half a dram, Musk five grains*; with the infusion of *Gum Traganth*: Make Troches and lay them dry upon the Embers.

Or thus: Take *Troches of Gallia Moschata, Mesues and Nicolai.*

These scent a sweet scent, if they boyl in Rose-water.

The Privities must be anoynted with Civet by the Midwife.

Or this Linament: Take *Gallia Moschata Mesues one dram, Pouder Diamoschi, Diambra, of each half a scruple; Civet three grains, Saffron six grains, with Oyl of sweet Almonds or Been*: Make a Linament.

Or mix Musk, Amber, or Civet, in Cotton: Or this Pouder, Take *Storax, Benzoin, Gallia Moschata, of each one dram: Cloves, Cinnamon, wood of Aloes, of each half a dram; Saffron half a scruple.* This may be sprinkled with Rose-water and put into a bag and used like a Pessary.

Or this, which is not only well sented, but provokes the Termes. Take *Balm, Marjoram, of each one dram; Cloves, Mace, of each a dram; Pepper, Saffron, of each one scruple; Jet, Pitch, of each half a dram; Salt Peter one scruple, Alipta Moschata, which hath Camphyre half a dram, with Oyl of Bayes and Lillies, and a little Storax*: Make a Pessary.

Or others for the Termes which are there mentioned.

They which think it comes from stoppage of seed apply sharper and provoke the seed by divers Arts. Which we omit because we speak of another cause, yet we allow lawful Copulation: which revels and provokes Terms and alters the Nature of Virgins.

These are applied to the Navil and Share.

A Cataplasm: Take *Fern leaves, Lovadge with the roots, of each one handful; Rue half a handful*: Boyl them in Wine, and with Grease, make a Cataplasm.

Or thus: Take *Honey and Figs equal parts*, boyl them in Wine and Water, beat them; and add *Oyl of Spike and Dill.*

Also Flax from the Spindle dipt in Oyl of Dill.

Also Henbane bruised, with Oyl of Spike, applied to the Navil.

An Emplaster for the Share: Take *Galbanum one ounce, Storax one dram, with Oyl of Spike and Pouder of Cloves.*

Another: Take *Emplastrum Ceroneum, or for the Mother one ounce, Troches of Alipta Moschata one dram; Storax half a dram, with Oyl of Spike*: Make a Plaster.

It is good to wash the Feet to divert and strengthen the Womb, As; Take *Orris roots, Lovage, Fern, Motherwort, Calaminta, Nep, Penny-royal, of each one handful; Chamomil flowers one pugil, Juniper and Bay-berries of each half a pugil; Carrot, Caraway and wild Parsnip seeds and Agnus Castus seeds, of each one dram; Coriander two drams.* Boyl them in Water, add a little Wine.

A Bath of the same after purging, or to go to the hot Baths is good.

Frictions also or rubbings of the Lungs and Soles of the Feet, with Salt Vinegar and Oyl of Bayes, are good in the fit.

Also pul the Ears, Nose, and Hair upon the Privities.

Bind the Hips above the Knees, and the Hypochondria with a Girdle.

Apply a great Cupping Glass below the Navel and smal ones to the Hips.

Apply a Dropax and Sinapisme to the Loyns and Share.

A Cautery in the Coronel suture is good if the Head be

be afflicted. If the Terms be ſtopped, open a Vein in the Foot; and Scarifie under the Ham, and apply Horſleeches to the Ankle.

Let her avoid cold Air, in the lower parts chiefly, and Feet which muſt alwaies be kept warm. Let her exerciſe moderately, and ſleep moderately, and not be diſturbed in mind.

The Cure of ſhort Breathing from wind and humors in the Belly.

And if in other Diſeaſes the Diaphragma or Midriff be hindered by Wind or Humors from other parts. The Cure is by thoſe Diſeaſes: as in the Wind of the Colick, Stomach, Repletion, Tympany, Dropſie, Hardneſs of the Bowels and Schirthus.

The Cure of Suffocation by Muſhrooms.

It is done by Vomiting with the Decoction of Radiſh, or with dried Hen-dung and Oxymel. Or, Take *Oxymel one ounce and an half, Sal Niter half a dram,* and drink after it *Wine* of the *Infuſion* and *Decoction* of *Wormwood and Balm.*

If the Inſtruments of Breathing, Voyce and Speaking, as the Mouth, Jaws, Palate, Tongue, Rough Artery, Lungs and Breaſt be hurt, you muſt proceed as followeth.

The Cure of Stutt ering from drineſs of the Tongue.

The Cure of Short-windedneſs from the hardneſs of the Griſtles of the Ribs.

If too much drineſs and hardneſs of the Tongue hinder the Speech, or of the Jaws, the Voice the Cure is ſhewed in the privation of Taſt. But if the Griſtles of the Ribs are hard, and cauſe old men and women to be Short-winded (being wholl cheſted as they call it) this cannot be cured. Therefore they are conſtrained to be at reſt, and not cauſe the leaſt breathing violently by motion, that they may ſpend the remainder of their daies in quiet.

The want of Speech from the greatneſs of the Tongue.

When the Tongue is growen biggar or leſs or otherwiſe deformed, whereby the Speech is hinder'd, this cannot be cured if it be from the birth. But by Practice ſome that cannot pronounce ſome ſorts of Letters, they learn them as we read of *Demoſthenes.* If the Tongue be ſwollen, ſeek for the Cure in Tumors.

The Cure of the hinderance of ſpeech from the want of Tongue, Palate, or Teeth.

When the want or deſect of a part is the Cauſe, there is no Cure. As when the Speech is hinder'd from a diſfigured Tongue, or loſs of Palate, or abſence of Fore-Teeth: yet ſome can make Artificial Teeth of Ivory or Bone that will ſtick faſt being placed in the ſpace.

The Cure of the cutting the rough Artery.

A great ſolution of continuity, or when the rough Artery is cut, and the paſſage ſtopt for breath, there is no Cure, becauſe they are commonly choaked, Yet we have read that ſome have been cured by diligence.

The Cure of Dyſpnœa from a wounded or broken Rib.

If a Rib be broken and thruſt inward and hinder the motion of the Lungs it muſt be reduced to its place: and cured as a Fracture. If a Ribbe diſplaced it muſt be reduced firſt, and then held there as a diſlocation.

The Cure of Sighes from the growing of the Lungs to the Breaſt.

If the Lungs be joyned by ſinal fibres to the Breaſt it being an organical Diſeaſe, it is incurable: And they are conſtrained as thoſe whoſe Griſtles are hard, to live with ſtrong motion.

The Cure of defect of Speech from the Contraction of the Tongue or of the Tongue-tied.

If Speech be hinderred from the ſtreightneſs of the Ligament or ſtring of the Tongue, as when Children are Tongue-tied, it is cured with the Finger, or Cutting: But when it is grown hard, it is incurable.

The Cure of Dyſpnœa from Repletion of the Breaſt.

When the Breaſt is filled with matter, Water or Blood, it cauſeth Coughing rather than hinders breathing, which ſendeth it forth, and therefore it is to be treated of in things ſent forth.

The Cure of Suffocation from the ſtoppage of the Mouth, Noſe or Jaws.

If the ſtoppage of the Mouth, Noſe, and Jaws hinder breathing, and come from external injuries as diving under water, or hanging, or from a weight upon the Breaſt, the cauſe taken away the breath wil return. But if there be fear of Suffocation from the fixing of the Teeth, or ſtoppage of the Noſe with filth, in an Apoplexy or Epilepſie, we ſhewed there how the Teeth are to be opened, and what elſe is to be done.

The Cure of Suffocation from the tying of the rough Artery.

If the rough Artery be ſuffocated from a Spondil diſlocated which lieth thereon which is difficult to be: it eaſily killeth. And if crookedneſs of Back cauſe ſhort breathing, becauſe the bones cannot eaſily be reduced, the Diſeaſe is deſperate. If ſtrangulation be from any thing fallen into the rough Artery, it cannot get out but by Coughing: and becauſe a Cough doth come of its own accord, when any thing fals in, we need not provok it. But neeſing doth very much help the expelling of it, and ſtriking upon the back as the vulgar ſuppoſe. But that which falls in is either caſt forth after long Coughing, or the matter ſticketh ſo faſt, that the Cough and ſtraitneſs do ſo perplex that they may be choaked, as we ſhewed in the Cauſes.

The Cure of Dyſpnœa from a Tumor in the Jaws.

If a preternatural tumor in the Almonds of the Ears cauſe difficult breathing, we ſhewed the cure in pains and Tumors. And we ſpake in the Muſcles of the Tumor thereof.

The Cure of Aſthma.

If an Obſtruction in the Lungs by a tough flegmatick Excrement produce an Aſthma, and it continue long, in old men it is incurable, in others it is difficult, eſpecially if they ſpit not forth the matter that ſtoppeth; And the Diſeaſe is increaſed with a new Defluxion: which if it be great in a Fit when before they feared Suffocation, it often ſuddenly ſuffocateth. But if the Aſthma came from a Clay or Gravel-like matter, in one part only, it doth not ſuffocate as that from flegm which takes up more room, except a Defluxion comes upon it, and and ſo increaſe the ſtoppage, neither is this eaſily cured except it be caſt forth by the long force of a cough, and then the old Diſeaſe is ſuddenly cured.

The Method of Cure is, to cut the humor ſo fixed, and to cleanſe, and to dilate the breaſt that it may expel it. And this will expell the Gravel by medicines inward and outward. Then if a Catarrh cauſe or feed the Diſeaſe, the Body muſt be cleanſed: the head muſt be dried and the humor that flows from thence muſt be revelled. And if ſtraightneſs come from Wind that ſtretcheth the Stomach or Belly it muſt be diſcuſſed. All theſe are to be done by Fumes, by Attractives, by Burners, cutting and motion of the body, as we ſhal ſhew.

Prruges

Purgers are to be given out of the Fit if Defluxions cauſe or encreaſe an Aſthma, in reſpect of them, for otherwiſe they wil draw nothing from the Breaſt. And in other cauſes that the body being cleanſed may be better ordered. But theſe are not to be ſtrong except the body be very foul: but gentle and often, except the Defluxion be very troubleſom, and then you muſt do as ſhal be ſhewed, but for the Aſthma Thus.

Gentle Purgers which expectorate are Caſſia, Manna, Polipody. Take *Liquoriſh half an ounce, Raiſons ſtoned and Figs each one ounce*; *Jujubes half an ounce, Polypody dried ſix drams*, boyl them and diſſolve *three ounces of Manna* or *one ounce and an half of Caſſia*.

Old Cock Broth is commended of all men in which diſſolve Caſſia or Manna as was ſhewed, or other Electuaries that purge flegm.

Or thus, Take *an old Cock, kill him, pluck him, and gut him, then take Raiſons and Figs each four ounces*; *beat them into a paſt: Carthamus ſeed and Polypody each two ounces*; *Senna one ounce, Agarick two drams, Anniſe one dram, Turbith one dram and an half, Ginger half a dram*, beat them with the paſt, with which ſtuff the Cock and boyl him in Water. Take it thrice, and if it work not at firſt, add Caſſia or Manna. Or you may firſt boyl the Cock, and after, the ingredients in his Broth.

Another uſed long is an excellent Remedy, Take *a Cock, and one ounce of Fox Lungs, Raiſons ſtoned and Figs two ounces, Leeks two ounces, Liquoriſh one ounce, Elicampane two drams, Hyſop, Savory, Horehound, Time, Calamints dried, Pennyroyal, each one dram and an half*; *Fennel and Aniſe ſeed each one dram*; *Carthamus ſeeds and Polypody bruiſed each half an ounce*; *white Tartar one dram, two yolks of Eggs, freſh Butter half an ounce*. Pouder and cut them and beat them into a paſt, ſow them into the Cock and boyl him til his fleſh fall off in much Water in a great Veſſel, then ſtrain it, and to ten pints of the Broth add one pound of Honey, that it may not quickly corrupt, give a draught with *Manna* and *Caſſia each half an ounce*; in the morning for many daies. And this wil work better if you give after it one dram of Turpentine with Penedies in the form of a Bolus.

Three drams of the Troches of Violets without Scammony are good for the Breaſt and purge flegm, with a pectoral Decoction or Water.

Stronger are thus made, when the flegm is much. Take *Violet flowers ſix drams, Turbith four drams, Agarick three drams, juyce of Liquoriſh, Manna, each two drams*; *Scammony one ſcruple*, with ſyrup of *Violets* make *Trochiſks* give *two drams*.

This Potion is good. Take *Agarick one dram and an half, Turbith one dram, Ginger half a dram*, pouder them and Infuſe them in *Oxymel or Hydromel one ounce, and as much of white Wine, Hyſop and Fennel water*, ſtrain them, diſſolve *Diaphenicon and Diacarthamon each one dram and an half*; *Manna, Syrup of Violets each one ounce*.

Pils. Take *Pils of Agarick, Cochiæ, each one ſcruple*; *Troches of Alhandal ſix grains, with Oxymel of Squils* make *Pils*.

This Wine is good if there be Wind which ſtraiteneth. Take *Senna two ounces, Agarick half an ounce, Turbith two drams, Squils two drams, Wormwood three drams, Bayberries ten, Aniſe ſeed one ounce, Fennel, Caraway, each two drams*; Infuſe them in *Wine* and *Honey* and let him drink thereof in the morning.

The pulp of Coloquintida infuſed in Wine is excellent.

An uſual Electuary. Take *Manna, Caſſia, each two ounces, Diaphenicon and Diacarthamum, each one ounce*; *Syrup of Violets and Oxymel of Squils, each half an ounce*; make an *Electuary*: give *two drams* and after more at a time.

A day after purging uſe, Mithridate or proper Conſerves to refreſh.

Vomits are given, out of the Fit leaſt, too much ſtraining ſhould bring fear of Suffocation. Tobacco water diſtilled is moſt excellent.

The humors muſt be prepared before Purging, with things to cut flegm, and they muſt alſo be given afterwards,

Thus: Take *of Syrup of Liquoriſh and Hyſop each one ounce and an half*; *Oxymel of Squils one ounce, Hyſop, Fennel and Colts-foot water each three ounces*; make a Julep for three daies to be continued, mix Pouder *Diaireos*, or give a *Lozenge* thereof after.

Or with this Apozeme. Take *Liquoriſh one ounce and an half, Elicampane and Orrice each half an ounce*; *Horehound, Maidenhair, Hyſop, Colts-foot, each one handful*; *Scabious and French Lavender flowers, Violets, Mallows, each one pugil*; *Aniſe and Fennel each two drams*; *Raiſons ſtoned, Jujubes, each one ounce and an half*; *Dates three, Figs ten*, boyl them adding to the ſtrained Liquor *Oxymel two ounces*, aromatize it with a little *Cinnamon*, let it be taken like a Julep.

Obſerve the ſame diet, as in the Night-mare, thin, of good juyce, eaſie concoction, not windy, crude, aſtringent.

Among others *Dioſcorides* commends old Cock broth, and Snails.

For Sauce, mix Saffron, for the Breaſt, and Muſtard with Honey doth expectorate wel.

Beans, Barley, Orobus, Almonds, Pine-nuts, with Carua and Fennel to correct the wind and Figs, Raiſons, Dates.

Take *Leeks two ounces*, boyl them in *Water* or *Cock broth til they be ſoft*, add *the Yolk of an Egg and Butter two ounces, Sugar one ounce*, boyl them again a little, let him eat one half at Dinner and another at Supper.

Let him drink Mead or Hydromel with Hyſop boyled therein.

Or this Ptiſan. Take *Barley one pugil, Liquoriſh two long ſticks bruiſed, Raiſons ſtoned twenty, Figs fifteen*, boyl them in eleven meaſures of Water to eight, adding *Jujubies twelve*,

There are divers Medicines which cleanſe, lenifie and cut matter in the Lungs that it may be coughed up, and are good in all cauſes.

This Decoction, for morning and evening. Take *Liquoriſh one ounce, Elicampane, Orris, each half an ounce*; *Maidenhair, Hyſop each half a handful*; *Raiſons and Figs, each one ounce*; *Saffron one ſcruple*,, boyl them, and add *Honey*.

Or thus, Take *dried Horehound, Germander, Hyſop, each one handful*; *Stœchas flowers one pugil*, boyl them in *Honey* and *Water*.

Or thus. Take *Orris two drams, Horehound, Rue, Calamints, each one dram*; *Nettle and Fenugreek ſeeds, each two drams*; *Raiſons ſtoned one ounce*, boyl them, add *Honey* or *Oxymel of Squils*.

Or this. Take *Liquoriſh two ounces, Orris, Elicampane each one ounce*; *Horſtail one ounce and an half, Valerian, Squils, each two drams*; *Maidenhair, Coltsfoot, Bettony, Veronica, Hyſop, Savory, Horehound, Calamints, Time, each one handful*; *flowers of Stœchas, Roſemary, Scabious, each one pugil*; *Aniſe and Fennel ſeed each half an ounce*; *Nettle, Rocket and Watercreſs ſeed, each one dram*; *Figs, Raiſons each four ounces*; *Jujubes, Sebeſtens, each ten*; boyl them in *Water* and *Honey*, add *Peper* and *Spike each one ſcruple*: let him drink of it often, or with more *Honey* or *Sugar* and *Manna*, make a *Syrup*.

Another Syrup. Take *Radiſh roots four ounces, Leeks three ounces, Orris two ounces, Elicampane, Dragons Green,*

each one ounce; *Squils half an ounce, Liquoriſh one ounce and an half, Savory, Penny-royal, Hyſop, Savin, Horehound, Germander, of each one handful; Coleworts, and Coltsfoot, of each two handfuls; flowers of Stechas one pugil, Fennugreek and Carthamus ſeeds, of each ſix drams; Bay-berries half an ounce, Spike half a dram, Saffron one ſcruple:* Make a Decoction, and with Sugar and Honey and Syrup.

A Wine. Take *Liquoriſh one ounce and an half, Orris one ounce, Elicampane half an ounce, Angelica, Squils, of each two drams; Horehound, Hyſop, of each three drams; Annis, and Fennel, of each two drams; Nettle, and Water-creſſes ſeeds, of each one dram; Honey clarified ſix ounces, white Wine one pottle.*

Sows or Hoglice tied in a clout and ſteeped in Wine and ſtrained, is an excellent Medicine experienced by ſome.

Wine, Vineger, Honey, and Oxymel of Squils, given in the fit are excellent.

Alſo juyce of Scabious and Sowthiſtle, alone or with Honey.

Or, Take *juyce of Elicampane, Hyſop, Horehound, of each one ounce; water of Hyſop, Colts-foot, of each three ounces;* Boyl them with Sugar, give it often.

It is thought good that they drink their own Urine.

A Spoonful of this water often taken is excellent: Take *Squils prepared two drams, Elicampane half an ounce, leeks one ounce, Muſtard and water Creſſes ſeeds, of each one dram; Cinnamon three drams:* beat them, and with ſtrong Wine draw a water, add *Honey of Roſemary, or of Squils.*

Alſo Oyl of ſweet Almonds, or freſh Butter.

Let Figs toaſted and ſteept in wine be eaten.

Alſo roaſted Leeks and Onions, with Honey and Butter, or Dragon roots ſo ordered. Or, Cuckow-pints, but if they inflame the Mouth, beat them up with Oyl, Sugar, and Honey. Or, boyl them and throw off the water. Alſo a roaſted Squil with Honey is good.

Or this: Take *juyce of Leeks two ounces, juyce of Dragons one ounce, juyce of Squils, Radiſh, of each half an ounce, juyce of Hyſop, Elicampane, of each one ounce; with Honey ſix ounces:* Boyl them to an Electuary.

Let him often eat Conſerve of Orris and Elicampane.

And Take *one dram of Turpentine, with the Yolk of an Egg and Honey.*

Let him take every morning Brimſtone prepared, that is waſhed often with Coltsfoot water, with Orris root, and a little Salt in a rear Egg.

Things that are licked are of Syrups of Hyſop, Horehound, Oxymel, Lohoch of Fox Lungs, Coleworts, Coltfoot, Carthamus. Pine-nuts, Mucilages, Lochſanum, and of Squils. And the Species of Diairios, and Salomonis, Pleres Archonticon and Diahyſopi.

Other Eclegma's are thus made. Take *Gum Ammoniake diſſolved in Aqua vitæ two drams, water creſs and Nigella ſeeds, of each one dram; Sal Ammoniak half a dram, Sulphure prepared one dram, Saffron five grains, prepared Fox Lungs one dram and an half, with Honey of Squils and convenient Syrup two ounces:* Make a Lohoch.

Or thus, Take *Althea roots two drams, Orris one dram and an half, Elicampane, Birthwort, Aſarum, Bryony, of each one dram; Gentian, Cuckowpints, of each half a dram; Savin, and Coltsfoot, of each one dram and an half; Fennugreek, Time, and Carthamus ſeed, of each two drams; Bayberries one dram, water Creſs, and Nettle ſeeds, of each half a dram; Powder of Fox Lungs and Gum Ammoniack diſſolved in Vinegar of Squils, of each two drams; Sulphur vive, or Quickbrimſtone waſhed in Coltsfoot water, and boyled Turpentine, of each one dram; Storax half a dram, juyce of Liquoriſh one dram with Honey of Squils, or one of the former ſyrup:* Make a Lohoch.

If the Belly be bound: Take *the Mucilage of Marſhmallows, and Lineſeed, of each half an ounce; Manna, Caſſia, of each one ounce; Agarick, Turbith, of each one dram; Oyl of ſweet Almonds, or Butter and Penedies, of each one ounce.*

Alſo this Pouder: Take *Liquoriſh, Polipody, of each two drams; Orrice, Elicampane, of each one dram; Dragon roots half a dram, Water-creſſes ſeeds and Nettle ſeed, of each one dram; Cinnamon one dram and an half, Saffron one ſcruple, Pouder of Fox Lungs two drams, Sugar half as much as all:* Or with Colts-foot water, make Lozenges with more Sugar.

This is commended highly: Take *Saffron one ſcruple, Moſch one grain,* give it in white Wine.

Pills: Take *Gum Ammoniak diſſolved in Vinegar of Squils two drams, Storax, Sagapenum, Myrrh, of each half a dram; Turpentine, boyled one dram, Spike one ſcruple, Saffron half a ſcruple,* with Honey make Pills, the Doſe is half a dram.

If therebe a Catarrh, to ſtop it and ſtupefie the ſenſe of the Breaſt, thickners and Stupefactives muſt be given of which in Catarrhes.

We may uſe this: Take *Barley cleanſed ſteep it ſix houres,* then boyl it well, that it may be diſſolved, then take *ſweet Almonds three ounces blanched, Gourd ſeeds one ounce and an half, Melon ſeeds one ounce, white Poppy and Lettice ſeeds, of each half an ounce:* beat them, and with Barley Water, make a milk, which being mixed with *two pound of the Pulp of Barley,* muſt be boyled and ſweetened with Sugar; let him drink *ten drams* in the morning in his bed, and at evening. This is an uſual Medicine with the French and Italians to ſtop Fluxes.

Alſo Treacle, Mithridate, Philonium, with pouder of Liquoriſh in the fit, or with Diapenidian or Lohoch of Fox Lungs,

Let him hold Diatragacanth in his Mouth: or, Take *the Pouder of Diatragacanth Frigid two drams, Frankincenſe one dram, juyce of Liquoriſh half a dram, Saffron half a ſcruple,* with Syrup of Violets, make Forms.

Let this Fume be taken at the Mouth but not ſuddenly, or much leaſt it Suffocare: Take *dried Colts-foot one dram, Frankincenſe, Maſtick, Storax, of each half a dram; Sulphur one ſcruple,* with Turpentine, Make Troches.

Caps and the Chamber alſo may be ſmoaked with the ſame.

Anoynt the Breaſt with looſners and concoctors, As Take *Oyl of ſweet Almonds, Lillies, of each one ounce; juyce of Hyſop one ounce and an half:* Boyl them till the juyce be conſumed, add *freſh Butter, Mucilage of Fennugreek and roaſted Lillies, of each one ounce and an half; Ducks Greaſe half an ounce, Saffron one ſcruple, white Wax a little.*

Or uſe the reſumptive Oyntment.

Apply things outward to the Stomach, if it be ſtretched with Wind, which increaſeth the Aſthma.

And to the Head to ſtop Catarrhs, dry and ſtrengthen the Head, if the Diſeaſe come from thence.

There are waſhes for the Head alſo, and hot waſhes for the Feet, do revel from the Head and Breaſt very much: Of the Decoction of Sage, Lavender, Chamomil, Elder and other hot ſweet ſcented Herbs.

Alſo Frictions are good.

And Cupping Glaſſes to the Shoulders, Thighs, often uſed to draw the Humor that flows to the Breaſt, backwards and downwards: and if they be applied under

under the Breasts they discurse the matter.

Also Issues in the Armes, Legs. And Vesicatories in the Wrists, and Palms of the Hands, or behind the Eares. And in the middle of the Breast, they are excellent in all sorts of Asthmaes. *Aetius*, bids that part to be burnt. And others apply a Dropax.

If there be a Plethory, open a Vein.

And if the Belly be bound, use Clysters that expel wind, and loosen, and Suppositories.

Belching and Farting are difficult without Art do help, (though some can suck in the Air and belch it out again, and kneel down with their Arse lifted up and fart at their pleasure) It is good to put the Finger, or a Feather into the Throat and provoke Vomiting.

In the fit let him rest and move not, nor speak much, for so breathing is made quicker which will perplex more. And if he lie down let his Head be very high, with divers Pillows.

CHAP. V.

Of Breathing Depraved.

The Kinds,

WE call it a Depraved Respiration which is evil, either too much, or disorderly, not only without the evil, or involuntary. But Voluntary.

Respiration is involuntary, when Inspiration, or Breathing in is too quick or too great, or when Expiration or Breathing out is violent or interrupted, too short or too long, in divers kinds, either with divers noises, or with manifest voiding. These in sound men are from smal causes, and are but light afflictions; but somtimes they are greater and sorrel Diseases, or are constant, and Symptoms of Diseases, and if great Excretions are voided they are referred to that Head.

Quick Breath. Often and quick respiration when the Air is suddenly drawn in and suddenly sent out, may be in some men, and be also the Symptom of a Disease.

Sighing. Great Respiration in Sighing in which the Air is attracted with great labor and thrown out again with a lamentable sound, may be in the sound, and sick.

Yawning. There is great Respiration in Yawning, or Oscitation, in which the Mouth is wide opened, and the Air drawn in much, and presently sent out with a doleful sound. With this Pandiculation is commonly joyned, as we shewed. They are both in the sound, and sick.

Hickets. In the Hicket there is a short and interrupted Respiration, the Air breaking forth with a sound in a moment. It is in sound people; and in sick a dangerous accident, and holds many hours.

Neesing. In Neesing, there is a sudden sending forth of Air with more force and noise and a shaking of the whol Body. It is many times together somtimes, causing Tears and throwing out whatsoever is in the Jawes, or Nostrils. It foreruns Catarrhs and great Diseases, as the Falling-sickness somtimes. Hence come the crying of *God bless you*, at that time as we shewed in Epilepsie. It somtimes follows Diseases, and puts an end to them, and in some people it comes upon a slight occasion.

Coughing. In a Cough the Air is thrown out with as much force as the other, and with a noise but chiefly from the Mouth, it is somtimes long somtimes short and returns, usually sending humors to the Mouth that are spit forth afterwards, then it is called a moist Cough, as that in which nothing is voided, is called a dry Cough, and if it be smal, *Tussicula*, or a Kecking. But if it be vehement it causeth Vomiting, Weeping, and Hoarsness by clamor, or takes away the Voice: And if it continue it causeth pain in the Breast and Belly by the shaking thereof. This Cough may be in some Men from outward causes, but in old men it is so usual that it seems a Natural Excretion. In many Diseases it is troublesome and the chief Symptome.

Belching. There is a more strong and continued sending forth of wind in belching, in sound and sick, it is stinking or otherwise.

Vomiting In Vomiting, there is breathing forth with greater straining, somtimes without matter sent forth, and it is the Symptom of many Diseases, lasting long and much afflicting.

Vociferation, Anhelation, Suffiation. There is also a Voluntary sending forth of Air from the Mouth and Nose in Vociferation or hollowing and in Anhelation which is hot breathing, and Exsufflation which is cold breathing.

Emunction. Emunction, or blowing of the Nose is voluntary with force and Noise, sending forth Air, and Humor; with holding of the Nose that the part being strightned, the sending forth may be more violent: or else the Nostrils are open and the matter is snuffed out.

Spitting. We cast out Humors voluntarily, also by spitting with the Mouth contracted that the Wind may be stronger. And by Hawking we fetch it out of the Jawes into the Mouth, and so squirt it forth. These two are somtimes Symptomes of Diseases. Somtimes sound men have them from plenty of Humors in the Jaws; or from custom. As when Oratours spet at every ful point.

Hawking.

Hoarsness. Hoarsness, is when the Voyce is rough and unequal. The Articulate Voyce or Speech is sent forth badly, when men Stemmer in pronouncing some Letters: But when they cannot speak them plainly it is to be referred to Speech diminished, as we shewed in the defect of Respiration. But when there is no defect but they pronounce some Letters with a double sound, as R. then it belongs to Depraved Speech.

Stammering.

The Causes.

All the Causes of all the Kinds of Depraved Respiration are from the Heart and Organs of breathing. Respiration, and especially Inspiration is from the Heart to get vital Spirits. And it is enlarged if there be not sufficient Air: or when the Spirits are moved vehemently.

Affection of the mind is the cause of sighs. If the Heart be deprived of Air by respiration intermitting, which the heart must have for the generation of vital spirits: then to recover what was lost it fetcheth a great Inspiration or Sigh: by which the Air being largely attracted, the Defect is made up. Respiration is intermitted when the mind through affection is so in-

some

tent upon other things, that it forgets breathing til neceſſity conſtrains it and makes it greater.

The Cauſe of ſighing or great Inſpiration, is the too much commotion of the ſpirits of the heart, by reaſon the preturbation of mind with Pain, Oppreſſion and Suffocation, of as we may perceive in paſſions. For thereby the heart is cooled and refreſhed, as we perceive plainly in ſighing. And this is the cauſe rather, than intermiſſion, and forgetfulneſs, in regard in the night when we think of nothing we breath ſufficiently.

Vehement motion is the cauſe of quick breathing.

Vehement motion of the whole body, as Running, Climing up a hil, which diſſipate the ſpirits, is the cauſe of quick reſpiration to reſtore them, not only to cool the heart, for reſpiration may be from motion without heat.

Heat is the cauſe of ſhort breathing.

Reſpiration is quicker if the body grow hot with too much pain whereby the Spirits are more conſumed, eſpecially when the heart is hot alſo, as it may be by hot houſes, as wel as motion, alſo by violent motions of the mind, as Anger, Joy, and Feavers, in which one Symptom is ſhort breathing.

And if the Organs of breathing are burdened or provoked, the expiration is greater.

A Vapor, Idleneſs or Imagination is the cauſe of yawning.

We ſhewed in depraved motion how the Organs of breath, being burdened with vapors, and deſiring to relax themſelves cauſe oſcitation and pandiculation,

The Organs of Reſpiration being moleſted cauſe blowing or exſufflation, when any of them being very ſenſible, as the Membrane in the *Aſpera Arteria*, Lungs, Noſtrils, Mouth, Jaws, Throat, Stomach, Guts and Midriff is offended, whereby they labor to blow forth what hurts them, and then the blowing is more or leſs according to the part affected. And we ſhal now ſhew how it may come from divers cauſes, ſplendor, vapor, air, humors.

The Brightneſs of the Sun is the cauſe of ſneezing.

As a great Light as that of the Sun by diſturbing the Eyes cauſeth tears: ſo it cauſeth ſneezing, by affecting the ſenſible Tunicle of the Noſtrils with which that of the Eyebrows hath conſent, in thoſe that have thin humors or exquiſite ſenſe of thoſe parts.

A ſharp Odour is the cauſe of ſneezing.

A ſharp ſcent or vapor, as that of Garlick, Onions, Muſtard, Radiſh, cauſeth Tears and Neezing by pricking the Membrane of the Eyes and Noſe.

Air and cold Water, is the Cauſe of Coughing and Hoarſneſs.

Much cold Air drawn in, that moleſteth the Tunicle of the Jawes and rough Artery cauſeth a dry Cough with Hoarſneſs, when by binding and drying it exaſperateth and maketh rough the parts that ſhould be ſmooth and ſlippery. And then the Voice is loſt, and by cauſing a Defluxion, it may by accident produce a moiſt Cough.

Cold Water drunk much doth the ſame, and aſtringents much uſed.

Things falling into the rough Artery cauſe a Cough.

If humors or other thick bodies fall into the rough Artery (being it is of exquiſite ſenſe, and cannot ſo much as have a touch of them) a cough is cauſed, and it is greater if the things be rough or ſharp. As it is when in eating or drinking any thing goes the wrong way in at the Larynx or Wind-pipe; as it often happens to them that ſpeak when they are eating, which enlargeth the wind-pipe, Water, Wine, or a crum of bread gets in, or the like which cauſe coughing by which they are ſent out at the mouth or Noſe. Alſo duſt or pouder may be drawn into the Wind-pipe and cauſe the ſame.

Things ſnuffed into the Noſe the cauſe of neezing.

And if the like be ſnuffed or drawn into the Noſe with the breath, being ſharp and pricking they cauſe neeſing, as Pepper, Pellitory, Hellebore, or ſharp juyces. And if they get into the Wind-pipe with the Air, they cauſe coughing.

Things held in the mouth, cauſe ſpitting.

Alſo things that burn the Jaws, and prick the mouth, chewed or held therein provoke ſpittle, as Pellitory, Stavesacre, and the like.

A humor from the Brain cauſeth a Cough.

A watry humor, thin, or thick, ſimple, or mixed with choler, which is ſalt, or is chewed in a Catarrh, if it fall into the Wind-pipe, it cauſeth a Cough which is greater, according to the quantity or ſharpneſs of the humor. And it continues when the Flux continueth, and is rather diſperſed than ſent forth by coughing.

All theſe are milder when the humor is watery, and not ſharp, as when it falls at night only, and is eaſily ſpit up the next morning.

A humor from the head is the cauſe of hauking.

Alſo the ſame humor falling from the head into the mouth or Wind-pipe cauſeth a hauking which brings it into the mouth and ſo ſends it forth. If it be tough and ſticketh long, it cauſeth a hoarſneſs, by making an inequality in the part which hinders the voyce, or it lies under the Tunicle and ſwels it. When filth is ſent hither from the whol body, it cauſeth a conſtant ſpitting, as after anoynting with Quick-ſilver; by which means an ulcer may be cauſed, which may cauſe hoarſneſs.

Uſe of Quick-ſilver is the cauſe of ſpitting.

An humor from the head is the cauſe of ſneezing.

If the humor from from the head be ſharp and thin, and flow to the Noſe, it cauſeth by pricking, neeſing and often ſniffling in the diſeaſe Coryza: and if it continue; Inflammation, and ulcers, from the heat of the humor.

Blood falling down is the cauſe of hauking and cough.

When Blood falls into the Jaws it is hauked out: when into the Lungs it is coughed out. And if it be ſharp and about the Noſe it cauſeth neeſing which foregoeth bleeding at the Noſe.

Flegm or Gravel in the Lungs the cauſe of coughing.

Alſo Flegm in the Lungs from their crude nouriſhment cauſeth coughing which continues according to the toughneſs as we ſhewed in Aſthma. As alſo ſtones or gravel growing there, eſpecially if they be in the greater branches of the Wind-pipe where the ſenſe is more exquiſite, and laboureth to get forth.

Matter in the Lungs, the cauſe of a cough.

Alſo matter in the Lungs cauſeth coughing: of flegm long conteined and ripened: or of excrementitious blood without an Ulcer; for which cauſe in the Pleuriſie and Peripneumony it is gathered rather from the Inflammation of the Lungs than ſtrained through the Lungs from the breaſt which cauſeth coughing as I ſhal ſhew there: ſomtimes it comes from

from an Ulcer or Impoſthume of the Lungs, and 'tis alwaies ſpit up in Conſumptions. In all which if the matter be white, concocted and temperate, the Cough is milder, but if yellow, green, black, ſharp or ſtinking, it is worſe.

Matter and blood in the Lungs, cauſe a Cough.

Alſo the matter in a Pleuriſie and Peripneumony ſweating through the Lungs at the firſt cauſeth a Cough.

Evil Vapors cauſeth Hickets.

And Blood in the paſſion of Blood-ſpitting.

If the Midriff in malignant Feavers be troubled with evil vapors and ſtir'd to ſend them forth, it is contracted and ſuddenly relaxed, as we ſhewed in Convulſions, and cauſeth the ſame in the Hickets as we ſee in deadly Diſeaſes. And in a burning Feaver when the Midriff is dried, this cannot be, but a difficulty of breathing.

If the Midriff be wounded with the Stomach, it cauſeth depraved motion; for the Midriff lieth upon the ſtomach, and hath the ſame Tunicle with the Stomach and the Nerves, therefore it muſt needs conſent therewith: And when the ſtomach laboureth to expel any, the Midriff moves to reſiſt it, with the other Muſcles of the breaſt, as it doth aſſiſt the Muſcles of the belly to preſs down the Excrements by ſtool.

The pricking of the ſtomach is the cauſe of Hickets.

If any thing offending the inward ſides of the ſtomach only, be to be caſt off, the motion of the Hicket is ſufficient; by which the Midriff ſhakes the ſtomach, and helps the expulſive faculty, that it may caſt the matter ſticking thereto into the hollow of the ſtomach, and mix it with the reſt: And then the pricking ceaſeth, and alſo the motion of the Midriff, except the matter cleave again to the ſtomach, and then the Hickets return. The Stomach is pricked thus by ſharp things, or ſuch as burn, or are enemies unto it, as Pepper, Onions, Purges, Poyſon, ſtinks, or cholerick malignant humors there bred, or ſent thither.

Heart-burning the cauſe of Neſing.

When the ſtomach is offended by conſent of the inward Tunicle, nature ſtrives to disburden it by a ſtronger motion, which is Neeſing, by which they which have pain at the Heart are ſuddenly refreſhed, becauſe the matter is by that means ſhaken into the ſtomach.

The Cauſe of Cough and Sneeſing from ſtomach and Guts.

And by the ſame conſent not only with the ſtomach, but guts and bowels adjacent there is a dry cough: as it appears in Children that have the Worms, which cauſe a dry Cough by their diſturbing of the ſtomach and Colon, and ſomtimes Neeſing: before which the Noſe itched by the conſent of the ſame Tunicle. And in other obſtructions of the bowels, the Midriff being burdened with their weight, there is a dry Cough.

Wind the cauſe of Belching.

Belching is a ſtronger motion than Hickets for the Midriff helps the ſtomach, when it is filled with Wind to throw it out, which ſwels like the matter that cauſed it.

Trouble in the ſtomach the cauſe of Vomiting.

When the matter is more ſolid as meat and Drink and humors, there is a ſtronger motion of the Midriff and Muſcles of the breaſt by Vomiting, by which the ſtomach is not only forced but turned, by which the matter and air is ſent forth with great noiſe by an unaccuſtomed way. This Vomiting is cauſed by things in the ſtomach that offend in quantity or quality, as we ſhal ſhew in Excretion and things caſt our.

Some Diſeaſes cauſe Hickets.

Alſo the Inflammation of the ſtomach and Midriff, and other Diſeaſes that hurt them, cauſe the Hickets; And alſo great Diſeaſes of the parts adjacent.

Diſeaſes are the cauſe of Hoarſneſs.

Preternatural Tumors and Ulcers in the Chaps, cauſe hoarſneſs, as we obſerve in the Leproſie and French Pox.

The Tongue diſordered is the cauſe of ſtammering and Wharling.

It is commonly from the Birth, that the Tongue is ſo diſordered that it cannot pronounce R. but like a double R. the Tongue is bent or otherwiſe. The cauſe of ſtammering is ſhewed in the Defect of Reſpiration.

The Cure.

Some kinds need no Cure, others are mentioned in other places.

The cure of Short-breathing.

If it come from ſtrong motion, there muſt be reſt, or by a contrary motion, as when it comes from aſcending, to deſcend.

If it come from paſſion, when that is paſt, the motion of the heart is paſt.

If from outward heat, cooling abates it, &c. In Feavers.

Sighing.

If it come from diſturbance of the mind and be often, it ceaſeth with it. Sighs ſhew the greatneſs of the Diſeaſe in the Mind, Head, or Madneſs. In other Diſeaſes when the mind is not diſturbed, often ſighing declares Puſilanimity or ſtrength loſt.

Concerning Yawning.

If it come not from wearineſs or want of ſleep which is natural, and be often, it foretels a Feaver or Ague as we ſhewed in Pandiculation which accompanieth it. It is cauſed by Imagination, eaſier in lazy people than in Active.

The cure of Hickets.

If Hickets be in acute Feavers and continue, it threateneth Convulſion, becauſe the Midrif is greatly affected, and death. If it come from the Stomach much offended with Hellebore, Poyſon or corroding things, or a great Diſeaſe, or Inflammation, it foretels the ſame from other cauſes; it is eaſily cured.

In the cure, firſt remove the cauſe as the Inflammation in a malignant or ſharp Feaver, if from the ſtomach being pricked lenifie it. And in all cauſes ſtop the inordinate motion of the Midriſe which comes by the Hicket. They are done by theſe following, as the cauſe is ſharp, hot, cholerick, biting, malignant, or cold and flegmatick.

If the cauſe be in the Stomach, Vomiting is beſt, for the Midriffe in the Hicket helpeth the ſtomach to expel together with the Muſcles of the breaſt.

The Vomit muſt be ſuch as cleanſeth, and allayeth ſharpneſs and heat, thus. Take *ſyrup of Vinegar and Oxymel ſimple, each ſix drams; Oyl of ſweet Almonds two ounces, with Water of Nuts or Decoction of Raddiſhes,* give it.

It muſt be repeated, if the Hicket ceaſe not, and ſtronger given ſuch as are mentioned.

Alſo purge. And if the Humor be tough, prepare it with Cutters and Cleanſers, as Juleps, Wormwood-wine, which is good both in a cholerick and flegmatick Humor.

Stomach Purges are given for this as Hiera &c. in the Diſeaſes of the Stomach. As in a hot Cauſe: Take *Wormwood one dram, Senna three drams, Rhubarb one dram,* Infuſe them in Wine, let them boyl and be ſtrained.

In a cold Cauſe: Take *Agarick, Turbith, of each one dram; Ginger half a dram, Sal Gem ſix grains, Hiera two drams Diagrydium one ſcruple,* with *Oxymel* make a Maſs, give *one dram.*

Theſe may be repeated if the Diſeaſe return.

Theſe following ſtop the Hickets, cleanſe the Humor, and Lenifie the Stomach, and after ſtrengthen.

In a hot cauſe when the humor is ſharp and burning, or in a diſtemper or emptineſs, theſe following are good.

Broath in great quantity and often, Ptiſans, cold or hot, water in great quantity, Oyl of ſweet Almonds.

Or, Take *juyce of Pomegranats half an ounce, Vineger two drams, Maſtick, dried Mints, of each half a dram;* Let him drink it.

Or other ſharp Syrups.

In a cold Flegmatick Cauſe: Take *Galangal, Ginger, of each half a dram, ſpaniſh Wine one ounce and an half, Cinnamon water half an ounce:* Or thus, Take *Galangal three drams, dried Wormwood and Mints, of each two drams; Spike, Marjoram, Dill and Carua ſeeds, of each one dram; Cinnamon, Cloves, of each half a dram:* Steep them in Wine.

Alſo: Take *Aqua vitæ one ounce,* infuſe *Cinnamon and Galangal, of each one dram;* ſhake it often.

Or this Electuary: Take *Acorns, that is, Calamus Aromaticus and Candied Ginger, of each one ounce; conſerve of Marjoram half an ounce, Powder of Galangal one dram,* with *ſyrup of Mints.*

Or theſe Pills: Take *Caſtor half a dram, Mumie one ſcruple, Maſtick half a ſcruple, with Honey of ſquils:* make a Maſs, for two Doſes.

We alſo allay the ſenſe of the Stomach with Treacle Methridate, powder of Tormentil, and if it come from Poyſon, they do good againſt the Hicket. And other Antidotes. You may give other Narcoticks if it hinder Sleep.

And Clyſters to revel downwards, and Suppoſitories, that Nature may rather ſend downwards then upwards.

The ſmel of Dill boyled with Maſtick ſtaies the Hickets.

Neeſing Cures Hickets, becauſe the matter offending is ſent from the Stomach and Midrif by a greater force.

Waſh the Mouth with cold Water and Gargle.

Apply things outwardly to the Stomach, as this Fomentation: Take *roots of Elicampane three drams, Mints, Wormwood, Spike, Dill, Pennyroyal, Calamints, of each one handful; Lavender, Roſemary and Cammomel flowers, each one pugil, Cumin, Carua, Dill ſeeds, of each one dram; Bay and Juniter berries, of each half an ounce; Maſtick two drams;* Boyl them in Wine to foment the Stomach before.

Alſo hot Aſhes with Aqua vitæ and Sack put in a bag or bladder and applied to the Stomach.

A Fomentation with Roſe Vinegar and a Spunge is good in a hot cauſe.

Anoynt the Stomach before and behind with looſning Oyls and after with Aſtringents.

Or apply this Bag: Take *Carva ſeeds half an ounce, Ammi and Dill ſeeds, of each two drams; Galangal, Cloves, of each one dram; dried Mints two drams, Maſtick, Frankincenſe, of each one dram; ſprinkle them with Roſe Vinegar.*

Emplaſters alſo, in a hot cauſe the Cerot of Sanders, Unguent of Roſes, of each one ounce; Maſtich half an ounce, Citron peels and Quince, of each one dram; with juyce of Houſeleek and Turpentine, make two Emplaiſters for the fore and hinder ſide of the Stomach.

It is good to waſh or bath the Hands and Feet in hot water.

And to bind the outward parts.

Apply Cupping-glaſſes firſt to the Shoulders and Navel, and then to the Stomach before and behind.

If you hold your breath, it ſtops the motion of the Midrif and abates the Hicket.

Or, Swallow down ſuddenly water or gulp divers times without it. Or, if you hollow and roar or runn, it cauſeth more breathing and then the Muſcles of the Breaſt with the Midrif help the Stomach to expel what is hurtful.

Alſo ſudden paſſions of the mind by calling in the ſpirits, take it away by frighting or noiſe or the like. And chiefly by daſhing the Face ſuddenly with Water.

Dioſcorides, Teacheth that *Abſinth* held in the Hand ſtops it.

The cure of Neeſing.

Neeſing is ſomtimes, a good ſign and in ſound people ſends forth that which troubleth, and in the declining of a Diſeaſe ſhews recovery. Somtimes it is a ſign of a diſtillation coming or Epilepſie in thoſe that are addicted to it. None of theſe ought to be ſtopped. But in bleeding at the Noſe, and in Ruptures, becauſe it provoketh the Gut down, and in Diſeaſes of the Eyes becauſe it cauſeth tears, and ſends blood thither and other Diſeaſes, in which it increaſeth pain, it is to be ſtopped. As alſo when it is ſo immoderate and continual that it cauſeth Head-ach, and diſperſeth the ſpirits.

It is then ſtopped by things that purge Excrements from the Head, if it come from the Flux of them into the Noſe as ſhall be ſhewed in *Coryza.*

They ſay the Decoction of Baſilicon ſtops it.

Palliate the Noſtrils, with the Vapor of warm water, and anoynt them with Butter, Milk, Oyl, Oyl of Gourds, Poppies, Henbane, and with the white of an Egg and Mucilages. All freſh.

The ſmel of Narcoticks, as of Opium, Oyl of Roſes or Willows, repreſeth the ſharpneſs of the Humors. As the ſmel of ſharp things raiſeth it.

Oyls, as thoſe of ſweet Almonds, Dill, Chamomil, Roſes, Willows, Gourds, and juyce of Baſilicon, are good to be put into the Ears.

And the Decoction of Baſilicon to waſh the Head. And Chamomel flowers in the Pillow. Foment the Breaſt to ſtrengthen the Muſcles with this: Take *Chamomel flowers two pugils, Melilot and Baſil flowers and Bran, of each one pugil;* put a ſtupe into the Decoction and Foment the Breaſt with it Squeezed.

Uſe Frictions, and Ligatures of the extream parts. preſs and rub the Ears and Eyes, and pul the Noſe, rub the Palate with the Finger and Comb the Head.

Holding of the breath as it Cure the Hickets, ſo doth it Neeſing, if the Noſe and Mouth be ſtopped.

Alſo frighting will Cure Neeſing, as ſoon as Hickets.

Strong drawing in of the breath doth ſtop Neeſing, which when the vulgar ſmel unto Bread, they impute to the ſent thereof.

Sleep

Sleep alſo ſtops it.

And darkneſs, as light increaſeth it. Therefore after a Cataract is couched they are kept a while in the dark, and you may do ſo in other Diſeaſes unto which Neeſing is an enemy.

Let the Head be laid high.

The cure of a Cough. If there be great Diſeaſes with a Cough look for the Cure in them. As in *Dyſpnœa* and Aſthma. When blood or matter is ſpet, ſee in *Hæmoptoica Paſſio*, Pleuriſie, Peripneumony, Phthiſes. And for the Cure of that which comes from the fault of Natural parts, in other places. But that Cough which is alone, is to be judged by the diverſity of the Cauſes, and to be ſo Cured. If it come from things fallen into the wind Pipe, then if they be not choaked as we ſhewed in *Dyſpnœa*, the Cough ceaſeth when they are caſt out. And if there be provocation in the jaws after, uſe the Lenitives following. If it come from cold, only uſe actual and potential heat, and Lenitives, and they will eaſily Cure. If it come from a thin Defluxion ſharp and ſalt, the Cough is troubleſome, provokes much, and it is not voided by coughing but diſperſed only, neither doth it ſtop till the Catarrh is gone, and the matter be thick and concocted, and then it is eaſily voided, and the Cough abates. If it come from thick Flegm fallen down or otherwiſe it is hard to be cured, if new matter ſtil come, after the old is voided.

In the Cure of both Coughs that come from Excrementitious Humors; we keep Humors from flowing, and ſtop them. And we ſtudy to expectorate that which is the conjunct Cauſe and Lyes in the Breaſt; by thickning it if thin; by cutting if it be thick; by concocting both and a little blunting the exquiſite ſenſe. And theſe chiefly correct this Symptom of Cough.

Thus give Juleps to prepare before evacuations, and after to expectorate, if the Humor be thin and ſharp, for three daies: Take *Syrup of Jujubies and Violets, of each one ounce and an half, Honey of Roſes, Syrup of Poppies, of each half an ounce, water of Coltsfoot and Violets, of each four ounces*: Make a Julep.

Or this Decoction: Take *Jujubes, Sebeſtens, of each twenty, Prunes ten, Clean-barley half an ounce, Liquoriſh one ounce, Violets two pugils, Roſes, one pugil*: boyl them, add *Penidyes one ounce, for three doſes.*

If the Humor be thick and cold. Take *Syrup of Liquoriſh one ounce and an half, of Hyſop, Oxymel ſimple, each one ounce; Water of Bettony, Horehound, Hyſop, each three ounces.* Make a Julep.

Or this Decoction: Take *Liquoriſh one ounce, Elicampane two drams, Rayſons ſtone, twenty pair, Figs ten, Dates five, Anniſeeds two drams, Fennel ſeed one dram, dried Hyſop two drams, Maiden hair, Coltsfoot, of each one dram*: Boyl them, and add *Honey two ounces*, for three or four Doſes.

If the Cough come from a Defluxion give Purges, but not too ſtrong leaſt, you increaſe the Defluxion, therefore mix Aſtringents.

If the Defluxion be thin and hot thus. Take *yellow Myrobalans two drams, Rheubarb four ſcruples, Agarick one dram, Spike ſix grains*: Infuſe them all in white Wine, ſtrain them and diſſolve the Electuaries, of the *juyce of Roſes one dram, ſyrup of Roſes ſolutive one ounce.*

Or give *half a dram of Aggregative Pills, and one ſcruple of Pill Aureæ*, Mixed with Wine.

In a cold thick Humor purge thus: Take *Agarick one dram, Turbith half a dram, Spike half a ſcruple, Ginger one ſcruple*: Infuſe them in Wine and Honey, ſtrain them and diſſolve *Diaphœnicon two drams, Honey of Roſes ſolutive one ounce and an half.*

Or with Pills: Take *Pills of Agarick two ſcruples, Cochy one ſcruple. With Wine, or Cinnamon water*, Make Pills.

If the Body needs more Purging, give this Decoction three or four mornings: Take *Liquoriſh two ounces, Orris one ounce, Elicampane half an ounce, Horehound, Coltsfoot, Hyſop, Betony, of each one handful; Annis, Fennel ſeeds, of each two drams; Rayſons twenty, Figs ten, Dates five, Cathamus and Senna, of each one ounce and an half*: Boyl them in Water and a little Wine, infuſe at the end *Agarick three drams, Turbith two drams*, ſtrain them, add *Honey of Roſes four ounces*; Boyl them a little and ſtrain them, and let him drink it.

Keep the Body looſe and Purge ſomtimes.

This Electuary is the beſt Lenitive: Take *Rayſons one ounce and an half, Currans one ounce, Sebeſtens fifteen, Figs twelve, Dates five, Caſſia new drawn one ounce and an half, Tamarinds one ounce*, Steep them and Boyl them in white Wine, make a Pulp, and add to it *Manna three ounces, ſyrup of Violets and Roſes ſolutive, of each one ounce*; boyl them a little, give a ſpoonful or two before Supper.

When we will gently Purge and ſtop the Catarrh alſo: Take *Agarick two drams, Maſtick and Frankincenſe, of each half a dram, with juyce of Hyſop make a Body. Take half a dram at night, or take one ſcruple of Majick Pills.*

If you will have them ſtronger: Take *Pill Aſſaret, Agarick, Rheubarb of each one dram; Frankincenſe, Maſtick of each one ſcruple, Saffron half a ſcruple, with ſyrup of Poppies*: make a Maſs, give *half a dram* at Bed time.

It is good in Defluxions when they continue to ſweat after purging.

Alteratives ſhall be declared which ſtay the Catarrh, if it cauſe a Cough with their healing and drying quality rather then with aſtringing: and which Expectorate, by thickning if the humor be thin, by cutting if it be thick, by cleanſing if it ſtick; alſo to Lenifie the paſſages and ſtupefie; many whereof were mentioned in Aſthma eſpecially to cut and cleanſe.

The ſolid forms for a Cough, are to be held long in the Mouth: and they ſtop the Catarrh from falling to the Wind-pipe, and mix with the ſpittle: or to be chewed, as troches, little things like Lupines, or Tablets, dry, like Pills to be held under the Tongue, at bed time, for in ſleep they are held better, and are not preſently Swallowed down when Melted. Theſe may be alſo held in the Cheeks where they hinder not the Speech and get into the Wind-pipe better when you ſpeak.

The root of Liquoriſh is ſo held and chewed which Lenifieth and cleanſeth, and the juyce thereof; but it is a little unpleaſant alone.

Sugar Candy, eſpecially that ſticks to the Glaſs where ſyrup of Roſes or Violets are kept is alſo good for the ſame.

The white Troches called *Bechici*, are more uſual.

But the red are better by reaſon of the Bole, or theſe. Take *the beſt Bole one dram, Maſtick, Starch, of each half a dram, Spike, Gum Traganth, Arabike, of each one ſcruple; Camphyre two grains, Penidies and Sugar Candy, of each two drams, with Mucilage of Fleabane*, make little Balls.

The black are Compounded of juyce of Liquoriſh, with Storax, &c.

There are yellow Troches alſo, very pleaſant and good. Take *Starch three drams, Liquoriſh two drams, Elicampane, Orris, of each half a dram; Angelica half a ſcruple, Saffron ſix grains, Penidies and Sugar-candy, of each two ounces*, with infuſion of Gum Traganth, make Troches; add *Oyl of Annis ſeeds two drops.*

The

The usual Lozenges, are Diatragacanth Frigid: Diapenidion without the Species, Sugar of Roses in a hot cause. In a cold, Diaireos simple, and Solomonis Diatragacanthum Calidum, &c.

A Linctus, or Eclegma, is usual for a Cough, because it goes down by degrees, and comes to the breast, it is to be taken with a Liquorish stick.

In a hot cause, Lohoch of Fleabane, Marsh-mallows of Mucilages; in others Lohoch Sanum, of Pine-nuts, of Fox Lungs, Coltsfoot, and Coleworts.

Many are made without Pouders and Lenifie more.

Others are Unctious, and the better for that, to which things of other vertue are added; And this kind is good for Children, because it smels like meat, and is sweet.

Junkets of Butter or *May* butter, are usual in *Germany* and very good taken by little or licked, Take *Starch one ounce*, dissolve it in Milk, boyl it to a pultis, add *fresh Butter four ounces*, *Sugar a good quantity*, when it is cold it grows hard.

An Eclegma of Oyl excellent for a Cough. Take *Oyl of sweet Almonds new drawn one ounce*, *Sugar-Candy half an ounce*, *Mucilage of Fleabane made with Rose water half an ounce*, lick it often.

This Mucilage is Lenifying: Take *Mucilage of Line-seed, Fenugreek, Fleabane, Quinces, all made with Rose water one ounce and an half, Penidies one ounce*: *Infusion of Gum Traganth, in Rose water, or Cinnamon water, half an ounce*, *Sugar-candy, or Penidies* as much as will make a Linctus.

This is good to Lenifie and loosen the Mouth and Belly: Take *Cassia, Manna, of each three drams*; *Penidies and Sugar-candy, of each two drams*; *Oyl of sweet Almonds and fresh Butter, of each as much as will make a Lohoch*. Of which let much be taken if you will Purge much.

Or, Take *Turpentine one dram*; *one yolk of an Egg*, *fresh Butter two drams*, *Honey half an ounce*: Mix them, lick it.

Syrups and Robs are made of Decoctions and juyces for to be licked. Syrup of Myrtles is most usual.

Also of Violets, Jujubies, in a hot cause, in another, of Liquorish, Maiden hair, Hyssop.

The Rob or thick juyce of fruits boyled is used instead of Honey, which in a thin Defluxion moveth it too much. Or use this, Take *Liquorish, Pease shels, of each three ounces*; *Raysons, Currants, Figs, of each four ounces*; *Prunes ten, Jujubies, Sebestens, of each twelve pair*: boyl them tel the fruits are dissolved, strain them and boyl them to a Rob.

Or thus of Juyces: Take *juyce of Coltsfoot, red Cole, Purslain, of each one ounce*; *juyce of Horehound, Hyssop, Sage, of each half an ounce*; *juyce of Liquorish two drams, Sugar and Honey, of each three ounces*; Boyl them to a Syrup.

Or of a Decoction in a cold cause: Take *Liquorish, Marsh-mallows, of each one ounce and an half*; *Elecampane, Orris, Fennel, of each one ounce*; *Angelica two drams, Comfrey half an ounce, Maidenhair, Hyssop, Pennyroyal, of each one handful*; *Horehound half a handful, Annis seed one ounce, Fennel seed half an ounce, Line seed three drams, Fenugreek two drams, Violets and Rosemary flowers, of each one pugil*; *Pease shels cleansed two ounces, Raysons stoned three ounces, Figs twelve, Jujubies and Sebestens, of each ten pair*; Boyl them, strain them, and add *Honey and Sugar, of each four ounces, and a little Cinnamon*; Boyl it to a Syrup.

Those that have Pouders, if they be not finely sifted will cause coughing. They are diversly made.

As of Seeds and Roots thus: Take *Line seeds, Fenugreek, of each a dram*; *Nettle seed, Bryony root, Marsh-mallows, Orrice, Elecampane, of each half a dram*; *Gum Traganth one scruple, juyce of Liquorish dissolved in Oxymel one dram*: Make a Lohoch.

Or of Fruits stoned: Take *sweet Almonds, Pinenuts, of each an ounce*; *Gourd and Melon seeds, of each half an ounce*; *Penides and Sugar-candy, of each an ounce*; *Manna half an ounce, with syrup of Violets, or Liquorish*: Make a Lohoch.

This of Sulphur is good: Take *the best Sulphur one dram, Orrice half a dram, Sugar-candy one dram and an half*: Make a pouder, let it be licked, or taken with a rear Egg.

For Compound Pouders. In a hot cause: Take *pouder of Diatraganth frigid, Diapenidies without species, of each one dram*; *Lohoch of Fleabane, Coltsfoot, of each half an ounce*; *Penides and Sugar-candy, of each six drams*; *Mallows and Cotten seed, of each half a dram*; *Line seed one dram, Liquorish one dram and an half, with syrup of Jujubies*: Make an Eclegma.

It is good to give things with Meat and Drink for a Cough, though they work less, because they mix with the spittle, and leave their Vertues therewith.

Also to Eat Figs, Raysons, and Prunes.

It is a usual Medicine for a Cough, to steep Figs in Aqua vitæ, and then dry them and after eat them.

Also Almonds, Pine and Pistach nuts alone, or candied, March pane and other sweet Meats also, and the junkats mentioned of Butter.

Also Meats of Barley, and Oats, and of Beans, according to *Dioscorides*.

Especially Barley and Almond Milk is excellent to stop a Catarrh, as we shewed in Asthma.

Or this, taken some spoonfuls towards bed: Take *Barley Meal, Starch, of each half a dishful, two whites of Eggs beaten*: Boyl them with Milk, and add *Sugar*.

Also a roasted Onyon with Butter and Sugar, or filled with Treacle and roasted and the juyce taken out and mixed with Sugar-candy to be licked. Also Leek Pottage are good.

And Radishes with much Oyl, a little Vinegar and Honey.

Eggs also rear dressed with fresh better and but a little Salt, for it provokes coughing.

Spinach and Rocket buttered.

A meat made of Egs boyled Wine and Batter, or Egs, Wine, Sugar, and Butter, which the Dutch call *Beanwarm*, that is *Warm-bones*.

Also warm Milk drunk with Penidies or Sugar-candy.

A Medicine wel of sented, sharp Apples, is excellent, and for to restore the strength also in other Diseases: Take *found Apples sliced round*, Lay them upon sticks in an earthen Vessel in a Wine-seller, sprinkle *Sugar-candy* thereon: Take *of the juyce that you shall find in the Vessel which fel from the Apples two ounces, Aqua vitæ, Rosewater, of each one ounce*; *Oyl of Cloves and Cinnamon, of each two drops*: Mix them, and give a spoonful or two often.

Another Lenifying Decoction: Take *Raysons, Pease shels, Liquorish, of each two ounces*; *Jujubies, Sebestens, of each ten pair*; *Barley cleansed one ounce*: Boyl them, strain them, and Clarifie them, let him often drink a draught, you may add *Sugar* and *Honey*.

Another to Expectorate: Take *Hyssop, Pennyroyal, Maidenhair, Cole worts, of each one handful*; *Figs ten, with Honey*: Boyl and scum and strain them, drink it.

Or

Or thus. Take *Line-ſeed, Fœnugreek bruiſed, each two drams; Aniſe and Nettle ſeed, each one dram; Baſil ſeed half a dram, Liquoriſh, Marſh-mallows, each half an ounce; Pennyroyal, Goldy-locks, each one handful and an half; Mallows, Violets, each one pugil; Figs ten, Dates five,* boyl them and add *Honey* and *Syrup of Liquoriſh.*

This is good againſt a Catarrh. Take *Frankincenſe, Maſtich, each one dram; Liquoriſh one ounce, Raiſons ſtoned ten pair, Figs five pair, Jujubes, Sebeſtens, each ſix pairs,* boyl them, add to the ſtraining *Penidies,* for a Drink.

Wine with things infuſed or boyled, eſpecially that of Elicampane is good, boyled thick.

Wine wherein Juniper berries are boyled is good for a Cough in Children, and it is ſtronger with Hyſop and Mother of Time.

Alſo the flowers of Gourd dried and boyled in Wine.

And of bitter things, Take *Elicampane half an ounce, Orris, Squils prepared, each two drams; Horehound, Carduus, Germander, Sage, Pennyroyal, Pauls Betony, each one handful;* ſteep and boyl them in *Wine.*

Some drink pouder of Ginger in Wine, at nights, in Winter. And if the Cough be of Cold it muſt do good; And becauſe it heats the mouth, and the virtue is carried by conſent to the Lungs it expectorateth. And *Dioſcorides* commends Pepper.

Brandewine is good with Sugar-candy, alſo the ſame burnt while it wil flame, and ſo brought to an Oyl.

Some commend the eſſential Oyl of Sugar thus made. Put four ounces of Sugar often waſhed with Sack, and dried, into a Glaſs; lute it wel, ſet it in the Sun or Aſhes over the fire, and ſublime the Sugar, which wil make a noyſe. This take out, and put it in the hard boyled whites of Eggs, and place them in a Wine-celler til you have a cleer Oyl. One ſpoonful of this ſwallowed by degrees is excellent.

The water of Pauls Betony or, Pouder of it with Sugar is good.

Alſo new drawn Oyl of ſweet Almonds.

That which ſtops the Catarrh, expectorateth, and taketh away the provoking to cough by ſtupefaction, is excellent.

As Diacodium at bed-time, or ſyrup of Poppies, or Lohoch of Poppies.

Or thus, Take *Syrup of Poppies or Diacodium one ounce, Syrup of Jujubes one ounce and an half, Mucilage of Fleabane ſeeds half an ounce,* make a *Lambitive* or *Linctus.*

Or this. Take *Garden Poppy heads almoſt ripe three ounces, Peaſe ſhels, Liquoriſh, each one ounce and an half;* boyl them, add *Penidies* and *Sugar-candy, each four ounces;* boyl them to a Conſiſtence, let it be licked at night.

Or, Take *Loboch of Poppies one ounce, Loboch of Fleabane half an ounce, Pouder of Diatragacanth frigid. one dram, Henbane ſeed half a dram, Bole one ſcruple, Penidies half an ounce.*

Some write for a ſecret that red Poppy water and Sugar-candy drunk at night is excellent.

Alſo Pils of Hounds-tongue or Storax are taken one or two of ſix grains in weight at bed-time.

If you wil uſe them often; Take *Storax, Myrrh, Frankincenſe, Galbanum, Spike, each one ſcruple; Saffron, Opium, each five grains;* mix them with *Honey* for *Pils:* let him hold one of half a ſcruple in the mouth, and if it doth not help take one ſcruple at bed-time.

Errhines are put into the Noſe, to bring the Catarrh into the Noſe. And clyſters to draw it downwards, of which ſee in Catarrhs. Maſticatories and Gargariſms which draw rheum to the Mouth cannot be good fumes to dry the Brain, taken in at the Mouth and Noſe, do reach the Lungs and Brain, and dry both.

Let him take into his mouth the hot vapor of the Decoction. Take *Maſtich, Frankincenſe, each one dram and an half, Salt two drams, Sulphur one dram, Calamus three drams, Colts-foot, Horehound, each one handful;* boyl them in water and take up the vapor by a Funnel.

A Fume from things burnt is ſtronger, if it be not in great quantity or ſharp. Take *Colts-foot dried half an ounce, Schœnanth, Storax, each two drams; Maſtich, Frankincenſe, Myrrh, each one dram; Henbane ſeeds half a dram,* with *Turpentine,* or *Infuſion of Gum Traganth* in *Roſe-water* make *Troches.*

Some things are applied to dilate the breaſt, and to allay its pain, and to concoct the matter.

In a hot caſe this Oyntment. Take *Oyl of Violets one ounce, Oyl of ſweet Almonds, ſweet Butter waſhed in Violet water, Hens greaſe, Mucilage of Fleabane made with Colts-foot water, each half an ounce.*

In a Cold this. *Oyl of Lilies, wall-flower, each half an ounce; Mucilage of Time and Fœnu-greek ſeed each half an ounce; Orris half a dram, Saffron one ſcruple,* with *Wax* make a *Liniment,* ſee the reſt in *Aſthma.*

Alſo the Reſumptive Oyntment.

An Emplaſter of Lillies and Onions boyled, and butterred.

And this Epithem warm. Take *Oyl of Cammomel, Violets, each one ounce and an half; Milk or cream of Almonds, made with Barley water wel boyled four ounces,* dip *Clouts* ſtrain and apply them.

Keep the Breaſt warm.

Uſe ſpiced Caps or pouders to the Head, waſh the Thighs with warm water to divert Catarrhs, in which Head herbs have been boyled. And when the Cough is hot, or ſleep is wanting, uſe cold herbs.

Apply Garlick and Bears greaſe to the feet, it is accounted an Oyntment that cureth.

Ligatures alſo, Cupping-Glaſſes, Cauteries, are good to revel, as we ſhewed in a Catarrh.

Holding of the Breath ſtaies Hickets and Neefing, and alſo Coughing; not becauſe then a greater heat is raiſed in the breaſt, but for the cauſe mentioned in Hickets.

Warm Air is beſt when the Cough is from Cold.

A hot houſe is good, becauſe Sweating after purging is proper.

Let him take heed of a cold Air and the North-wind, and a moiſt or Night-air or Weſtwind: the Eaſt aſtringeth. Alſo from the Head being inflamed with the Sun.

It is hurtful to lie with the Face upwards, becauſe ſo the humor fals ſooner into the mouth, except it be when you take Pils in the mouth.

Faſt ſometimes or eat little, exerciſe gently, ſleep moderately, and they wil hinder the increaſe of humors.

The Cure of Hoarſneſs.

If Hoarſneſs come from a Tumor or Ulcer of the Jawes, it muſt be cured as I ſhal ſhew in its proper place; for that being cured, the hoarſneſs ceaſeth: but if that be not cured, or ſo cured that there remaineth unevenneſs, the Hoarſneſs is uncurable. As I have known many from Leproſies and the Pox to be ever hoarſe. If it come from cold and drineſs, it is cured by warm, moiſt, and ſuppleing things. If it come from a Defluxion, after ſpitting of the humor up, it ceaſeth. But if the Defluxion return or the humor ſtick faſt, uſe things mentioned for a Catarrh. But for expectoration, it is beſt here to uſe Clenſers and Lenifiers ſuch as are mentioned there, to which I ſhal add theſe following choice things.

Myrrh held in the Mouth til it diſſolves is excellent.

Also the Infusion of Gum Traganth in Violet or Rose-water.

Hot Milk with the white of an Egg or Mucilage is good for a Gargle.

A raw Egg is experimental; but a rear Egg is better, because there is nothing from beasts eaten crude, but it is nauseous, except Milk.

Boyled Snailes also by reason of their sliminess, but they without Salt, are not eaten pleasantly, nor Eggs.

Also buttered Leeks, Coleworts and Arrach.

Also crude Purslane doth wonderfully take away roughness not only of the Teeth, but Jaws: And it is good boyled.

Also Cubebs beaten with Raisons: especially when it is from cold.

Juyce of Liquorish held in the Mouth.

Juyce of Coleworts boyled with Honey.

Oyl of sweet Almonds, Fresh Butter.

Mathiolus commends the water of *Phyllitis*.

These Compounds are also good. Take *Myrrh, Frankincense, Sugar-candy, each equal parts*: with *Mucilage of Gum Traganth* make smal *Troches* like *Lupines* to be held in the mouth.

Or thus. Take *Turpentine two drams*, dissolve it with the *Yolk of a small Hen-egg*: add *Orris, Myrrh, each half a dram*: *Cubebs one scruple, meal of Orrobus and Starch, each two drams*; *Penidies half an ounce, Honey* to make a *Lohoch*.

Rondeletius commends the Pils of *Benzoin*, and *Heli-dæus Avicens* Pils to be held in the Mouth.

Lobel saith that with this Syrup he cured Women that had been ten yeers Hoarse. Take *Erysimum or wild Mustard with the roots six handful, Elecampane and Colts-foot green, Liquorish, each two ounces*: *Borrage, Succory, Maidenhair, each one handful and an half*; *Cordial flowers, French Lavender, or Bettony flowers, each half a handful*; *Anniseed six drams, Raisons stoned two ounces*: boyl them in *Barley water* and *Honey*, add *Juyce of Water-cresses six ounces*: add as much *Sugar* to *two or three pints* of the strained Liquor as wil make a *Syrup*.

Or this. Take *Liquorish two ounces, Marsh-mallow roots green three ounces, Orris, Galangal, each half an ounce*: *Erysimum three handful, Colts-foot, Coleworts, Arrach, Mallows, Purslain, Green, each one handful*; *Mallows, Violets, each one pugil*; *Gourd and Melon seed, each half an ounce*; *Cotton seeds one dram, Barley and Beans, each one pugil*; *Raisons stoned twenty pair, Cubebs one dram*, boyl and strain them, and with *Honey* or *Sugar* make a *Syrup*.

Or this Gargle. Take *Liquorish and Marsh-mallows, each two ounce*; *Mallows with the roots one handful, Beans, Orobus beaten, each one pugil*; *Raisons stoned twenty pair, Figs, Jujubes, Sebestens, each six pair*; *Myrrh, Frankincense each three drams*; boyl them and with *Honey* or *Sugar* make a *Gargarism*.

The Cure of other kinds of Depraved Breathing.

Belching, Vomiting, Snorting, Spitting, Hauking: if they be preternatural shal be treated of in Excretion, here they are mentioned only for order sake.

Whooping, Panting, and Breathing or blowing hot do little hurt of themselves; so that we neither mention further their Causes or Cure. We mentioned in the Kinds what was different from natural Respiration.

CHAP. VI.

Of the Defect of Swallowing or passage by the Throat.

The Kinds,

WE say the passage through the Throat is wanting or defective, when things cannot go downward or upward as they ought somtimes.

Difficuly of Swallowing.

Sometimes they cannot swallow or it is with difficulty. And the hinderance is the greater, because the action is natural and usual. And then there is somthing appears in the Jaws, or there is pain; sometimes there is a defect of swallowing without a Palsie or Convulsion, as we shewed in Impotent motion.

Somtimes things cannot be sent upward, or with much difficulty. And though this be not natural or usual, yet it is somtimes necessary, and it hinders if it be not. It is either when by nature they can neither Vomit nor Belch.

Hinderance of Belching

Somtimes there is a desire to Belch and it is troublesome if it cannot be: but the passage is stopt, and there is a burning of this in a *Cardialgia*.

Difficulty of Vomiting.

A desire or endeavor of Vomiting is called *Nausea* or Loathing, and not only some things are loathed, but they feel the stomach troubled and provoked to Vomit, and the Rhewm sent to the mouth, and yet nothing is voided. This is worst for them that are used to vomit at certain times, because it is to them natural and the suppression thereof is troublesom.

The Causes.

The Cause of the Defect of these motions in the passage of the Throat, is either in the part that communicates the force of motion, or in the Instrument, the Gullet or Stomach.

The distemper of the Nerves is the cause of difficulty of Swallowing

Difficulty of Swallowing followeth from the Resolution and Convulsion of the Nerves of the sixth and seventh Conjugation, that come to the Muscles of the Jawes (which *Fallopius* saith cause the first swallowing not the hairs in the Gullet) and comes from the same Diseases with Convulsions of other parts; and then it is a kind of symptom of the Stomach if it be from a wound, or of a Palsie or Convulsion; as was shewed in impotent motion. If it come from a Palsie it is harder to swallow down liquid things than solid. And from the affliction of the same Nerves, in some Palsies they cannot speak plain, or cough, or vomit, though Nature force without danger of being choaked.

When the passage is stopped in the Gullet and swallowing hindered: which they say comes from the relaxing of the tufts as I shewed in the Muscles thereof: but because the Gullet moves not of its own accord, by its own villi or hairs but by the Muscles of the Jaws, as as we shewed this cannot be granted. The Causes

that

that hinder swallowing are when the gullet is too dry and cannot send meat down as in burning feavers: or if it be stopped by things swallowed either, great or sticking or rough, or sharp, or otherwise as *Rhasis* speaks of Horsleeches. From which being great and hard as nuts-shels, bones, because they press the Membranous side of the Wind-pipe which is joyned to the gullet and so straiten it, breathing and swallowing are also hindered, even as both passages suffer the same when from external injuries, tying or dislocation of a spondil, and are contracted when the Gullet is inwardly straitend by a Tumor of the Neck, or Inflammation or Defluxion, the Patient swallows with difficulty. Also when it is corroded or pricked, it cannot suffer things to pass for pain with inflamation. And this comes from sharp things or vapors, or humors; As a Boy that eat fish greedily and was choaked with a sharp bone that fixed in the Gullet after a great Tumor and Inflamation. Of the causes mentioned, some hinder Vomiting when it should be, but not all, because Vomiting being more forcible, Natural and Voluntary motion will sooner make way then swallowing which is only from our will. Besides these Diseases of the Gullet, if it be in a streight place, it cannot be dilated, and so Vomiting is hindered. Hence it is that they that have streight Breasts, and short Necks, are unfit to vomit.

The dryness of the Gullet, is the cause of difficulty of Swallowing.

Obstruction of the Gullet, is cause of difficult swallowing.

Obstruction of the Gullet, is cause of Vomiting hindered.

The streightness of the Stomach causeth difficult Vomiting.

And the streightness of the Neck causeth the same.

Vomiting is difficult from the fault of the Stomach. If it be not too loose nor the right Orifice too large, as it is naturally, and therefore men that have good Stomacks concoct well, yet being sick and stirred to Vomit by Medicines or Excrements, yet they cannot vomit but with great pain: And contrarily they who have too much dilated their Stomach by gluttony and drunkness, vomit upon the least occasion.

A boyling humor in the Stomach, is the cause of difficult belching.

When a sharp and hot humor boyles in the stomach, as we shall shew in Cardialgia or hartburning, it causeth a desire to belch from the breaking of those bubbles which it raiseth and which send forth, a wind or burning vapor to the Mouth of the stomach; but because the wind is dispersed before it come into the Gullet, there is no belching.

A tough humor in the Stomach is the cause of difficult Vomiting.

And if a Humor stick fast in the Stomach, and Solicite vomiting, yet it wil not cause it, because it cannot come forth, but the things taken may be vomited up. Though often the Humors are vomited and the meat retained, though but lately eaten, by natures choyce to cast out the worst, as we shall shew in immoderate Vomiting.

The Cure.

That we may know what to do in difficulty of swallowing, vomiting, and belching, we shall speak of each Particularly.

If difficulty of swallowing come from the Nerves affected and the Muscles of the Jaws loosned, in a general Palsie, it is the worse; because it signifies that, not only the pairs of Nerves in the Back, but also those of the sixth and seventh Conjugation, are hurt.

The Cure of the difficulty of swallowing, which is a kind of Palsie.

Except it be a Particular Palsie, as of the Tongue and parts adjacent which is also bad and threatneth a general; The same Cure is to be used, as in the Palsie, in respect of the causes. If it come from a Defluxion of water to the Nerves, it must be purged, revelled, and consumed, and the part confirmed.

Amongs which Mustard held in the Mouth, is excellent, as I shewed. And Pellitory of Spain, it draws water plentifully. And Tablets of Nutmegs, according to my uncles receit, are excellent.

Also Gargarisms that reach the Muscles of the Jaws. As this: Take *Calamus half an ounce, Sage, Rosemary, each one handful, Lavender flowers one pugil, Cypress Nuts four, Nutmegs two, Cloves one dram*: boyl them in Water and the fourth part Wine, and in one pint and an half, dissolve *Honey of Rosemary, and Squils, of each two ounces; Vinegar of Squils, half an ounce.*

Or thus: Take *Diamoron, Oxymel of squils, of each one ounce and an half; Sage, and Lavender water, of each four ounces:* Make a Gargle.

There are many Oyntmenrs for the Neck, mentioned in the Palsies, to which add these: Take *Oyl one ounce, Oyl of Spike, Mastich, of each half an ounce; Labdanum, Frankincense, Storax, of each half a dram*; with a little Wax make a Liniment.

If it be a kind of Spasmus, it must be cured, as that is; And the Topicks applied as in the Palsie. It is deadly from a wound, as we shewed in Spasmus.

The Cure of difficulty of swallowing, which is a kind of Convulsion.

If it be from heat in Feavers, see Feavers and cool with Epithems, to the Liver chiefly, and Gargarisms and Linctus, as in hoarsness, that comes from roughness of the Chaps, give moist meat, Unctions, Broths, Barley, Cream, Emulsions, &c.

The Cure of difficult swallowing from the dryness of the Gullet.

If the body fallen in be thick, or sticking, or Membranous, we must use divers arts, upwards and downwards.

The Cure of difficult swallowing from things fallen into the Wind-pipe.

Oftentimes things are driven down by a great draught of water, or washed off if they stick, or with a piece of Bread; or by neesing; but chiefly by vomiting, which is easier, if they can first take a great deal of Water and Oyl, and as *Rhasis* saith, if we strike the Neck of the Patient; If the thing may be seen and laid hold upon, we have Instruments for to take it out, as the forceps, &c.

And other bending things that may fit themselves to the passage, and so we thrust it down, as a thick stick of a birchen broom, or Beets, or any thing they will bend and not break, being green. If it be dry soften it in hot Lead, or anoynt it with Oyl, *Rhasis* useth Lead. But a Wax Candle dipp'd in Oyl, is best.

They say that a peice of a Spunge tied to a string and swallowed down, and after much water is drunk to swel it, pulled up again will fetch any thing out of the Throat: but this is best in thin and sharp things that trouble the Gullet, for it can do nothing except the Spunge be swallowed. This may be done by a great bead, which will be swallowed more easily, and may be done often.

We

We give Oyl or Butter to make the part slippery; and anoynt the Throat to enlarge it.

If a Horse-leech creep into the mouth, and stick to the Gullet, *Rhasis* shews the cure. But we advise it to be pul'd out with the Forceps, if it may be laid hold upon, or provoke it to ascend with drinking hot water, and holding afterwards cold in the mouth: or we drive it downwards as other Worms, with things that displease them, as by drinking Vinegar, eating Salt things, Onions, Garlick, Mustard, and the like, that are contrary to Worms, as shal be shewed in their places.

The Cure of difficult swallowing from a Tumor.

When the Gullet is strieghtened within or stopped by a Tumor, Inflammation, or Desluxion, or hurt by things taken in, if there be pain, the Cure shal be mentioned in the pains of the neck.

From Compression of the Gullet.

If it be pressed by external Injuries or loosning of the Spondil, in regard it hinders breathing which is the greatest danger, we shewed in Respiration what should be done.

The Cure of hard Vomiting.

If Vomiting be profitable to prevent Diseases, as *Avicen* commends it once in a month or oftener; or if it be necessary in Diseases to expell things that trouble the Stomach: and if it be difficult by reason of the unfitness of the Constitution by reason of the short neck and streightness of the breast, and mouth of the stomach; it is often inconvenient to force it. But if in such natures, it is necessary, and there be striving without success. We have shewed in divers Diseases where Vomiting is required, how to provoke it by filling the Belly and subverting it as they call it, and tickling the Jaws and Throat.

The Cure of difficult belching.

We shal shew in *Cardialgia* or Heart-burning, how that imperfect Belching with heat of stomach, is to be cured.

CHAP. VII.

Of the Defect of Dejection or going to Stool.

The Kinds,

THere is a Defect of natural Excretion of Excrements from the Belly, and it is called Constipation, or Astriction, or binding of the Belly. In which either nothing is voided, and the Belly is wholly stopped: Or the Excrements are voided seldom or less than is fit, or with great labor and straining.

Belly-bound

This is somtimes in sound people, whose nature is to go seldom to stool. Or according to *Hippocrates* it comes from the change of age, so that they who are in youth loose-bodied, are bound in old age, and so contrarily. In others it is from an evil custom and life, as shal be shewed, and is the cause of diseases.

It is a Symptom in divers Diseases both of the lower belly, joyned with Heart-pain, Colick, Jaundies, Ruptures and other accidents: And of the Head, with pain, giddiness and the like. And in Feavers this is a familiar symptom. And in other diseases it is so usual that it is the first and last symptom of which the Patient complaineth.

The Causes.

The Guts containing the Excrements must needs be afflicted in every Constipation or binding: either primarily when they are stopped, or secondarily when they have lost their expulsive faculty.

When the Guts are straitned, so that the passage of the Excrements is hindered, the Belly is bound. And this straitness may come from astriction or Convolution.

Drineſs of Excrements is the cause of Constipation or binding.

We call it Astriction when the Guts have lost their slipperiness, and are dried and wrinkled: or when they are bound and made straiter. Hence is it that Driers, Binders, sower and sharp things taken, as they astringe the Gullet and wrinkle the Jaws; so if they be taken imoderately especially fasting, they stop the Guts and their passages, and bind the belly. And this may come from long fasting, and too much evacuation. And from heat that drieth the guts, or rather the Excrements, as we shal shew. Some say that the Guts may be pressed and stopped by a Tumor in the Mesentery: but we think it not to be possible, because when a Woman is with child, that great Tumor doth not cause constipation without some other accident.

Convolution or vouling together of the Guts the cause of Constipation, or Costiveness.

The thin Guts are somtimes so rouled together in the disease called *Convolvulus*, so that they are closed and the Excrements cannot descend: but are vomited up, either with pain called *Ileon*, when the Guts are inflamed, or with repletion of excrements without, Inflammation, as we shal shew in pains.

But this is most usual in Ruptures when the Guts fal into the Cods, from the breaking of the *Peritonæum*; by reason of the evil position of the Guts.

Obstruction of the Guts by excrements is the cause of Constipation.

There is an ordinary Constipation from the Obstruction of the Guts with proper Excrements, not only when they abound, but when they are dry, hard, thick, clammy, and hinder the Excrements that follow. This is usually in the Orifice where the thin Guts use to open themselves into the thick, by reason of the straitness there; where they have been so fixed, that the constipation hath been deadly as we have observed in Anatomy. This is often in the Colon, in the great turning thereof before it comes to the *Rectum*, by the hard dung retained and stopping and binding the Belly, with the pain of the Colick. And somtimes such hard dung is in the Arse-gut, and not voided without great straining, or help of Art.

The dung grows hard when the meat is too solid and dry; as we see in Dogs that eat bones: especially when they drink little. The same comes from the use of hot and dry meats. And it is in hot natures when the Liver and parts adjacent are too hot; in whom, if they go not every day to stool through long sitting, riding or lying in the bed (because the excrements fall down better when the body is upright or moved) the Excrements grow hard from their internal heat that drieth them. Hence it is that Senators, Riders, and old Men, complain of costiveness. And as it comes from

from moderate heat, ſo may it come from hot diſeaſes and Feavers. From faſting alſo, the Guts and excrements that remain may be dried, not only in the time of faſting, but after, if they be very hungry. And that becauſe nature being exhauſted draws whatſoever chylus or humor is in the meat, to recruit her by the Meſaraicks, and ſo leaves the Excrements dry and hard. Hence it is that after a long Diſeaſe, when the Patient eats much, he complains of a conſtipation: And though, they who nouriſh wel have rather a dry than moiſt belly, the Guts can ſcarce be ſo ſtopped by any thing but Excrements: for things that are ſwallowed though great and hard if they paſs the Gullet, may alſo paſs the Guts, except they ſtick in the Fundament: And what is written of the ſtone in the Guts it is rare, and can ſcarce be ſo big as to ſtop the Guts, except dung as they ſay, be turned to a ſtone.

Stopping of the Guts by other things beſides excrements is the cauſe of conſtipation.

Loſs or Dulneſs of ſenſe is the cauſe of Coſtiveneſs.

If the Guts loſe their pricking and the expulſive faculty doth not move them, our wil is alſo at reſt being not admoniſhed thereby, and there is no dejection. This is when the Guts either feel not or very little, from the fault of the Nerves of the ſixth or ſeventh conjugation from whence the Nerves of the Guts ariſe. And in a general ſtupefaction they ſuffer with the other Nerves, and there is no dejection, as here in particular. The ſame may be from the Excrements when they are few, wherefore in want of appetite where little is eaten, little is voided, or from great purgings, til more excrements are made, which requireth ſome daies. Alſo if acrimony be wanting in the excrements, which naturally provoketh the Guts to ſtool, which is cauſed of Choller mixed with the excrements for that purpoſe there is alſo coſtiveneſs: as in obſtructions when choler is not carried to the Guts, but to other parts in the Jaundies and the like, as appears by the excrements which are not tinctur'd, but white or aſh-colored.

The Cure.

Every conſtipation of the belly needs not cure, as when ſome go ſeldom to ſtool, from nature and cuſtom, or moderate diet, which cauſeth few excrements and declares that the body is wel nouriſhed; as it doth after ſickneſs or Famine, except the Guts be dried and ſhrunk, which being dangerous requireth cure, which is difficult. But if coſtiveneſs come from dry meats, that bind, and are hot, it is cured by abſtaining from them, and uſing the contrary. And ſo you muſt when the body is bound by natural heat through long ſitting: and alſo when it comes from a hot temper or conſtitution: But in Diſeaſes when conſtipation is a ſymptom, as from heat in Feavers or ſtoppage or convolution of the Guts in the *Convolvulus* and Rupture (in which if the excrements are vomited, death is at hand) or from the loſs of provocation in Stupefaction, Jaundies, or the like Diſeaſes, we ſhal in treating of them ſhew you what you muſt do in reſpect of the cauſe.

Medicines that looſen the belly.

But the Medicines that are uſed chiefly for conſtipation, are to be taken in or injected, or otherwiſe, and here we ſhal mention ſome of them, the reſt are mentioned in the Diſeaſes that cauſe coſtiveneſs.

The gentleſt that moiſten and ſoften the hard excrements and by their ſlipperineſs looſen the paſſages, and provoke nature by pricking, are of things nouriſhing.

Young fleſh boyled, eſpecially Veal, alſo that which is fat and mucilaginous or ſlimy.

Butter and Oyl.

Temperate Herbs, boyled or raw, as Spinach, Beets, Arrage, Bugloſs, Coleworts; and ſtronger, as Mallows, Violets, and tops of Hops and Aſparagus.

All moiſt Fruits open the belly that are temperate and ſweet, but ſharp do it rather by troubling than looſning.

Drinking of Water or Milk.

Of Phyſical things, Caſſia and Manna in broath. Juyce or Syrup of Roſes, diſſolved in ſpring water.

Stronger are ſuch as purge, as the Infuſion of Senna with Wormwood and ſeeds, the reſt are mentioned in Purges for divers Diſeaſes.

For the Fundament there are divers Suppoſitories.

And Clyſters which prick and diſſolve the hard Excrements, by waſhing, mollifying, and opening the paſſages. Theſe are beſt in coſtiveneſs, and there are divers of them mentioned in the Colick.

Some things to looſen and ſoften are applied outwardly to the belly, as Oyls and the remainder of the Glyſters.

Alſo Baths of Sweet waters and Decoctions.

Alſo exerciſe makes the Excrements fall down, and medicines that looſen do it ſooner thereby.

And in regard none can go to ſtool without ſtraining, which is done by the will with holding the breath and contracting the Muſcles, not with the Will only with the expulſive faculty moving thereunto; we muſt endeavor ſo to accuſtom nature that it may conſent to the will in the ſame: And this is done by endeavoring morning and evening before and after ſleep to void the excrements. Becauſe nature obſerveth order not only monthly and dayly, but hourly in eating and expulſion of excrements. And if we obſerve this order at a ſet time, and ſolicite nature to dejection, and continue it; it wil be very helpful to evacuation by ſtool.

CHAP. VIII.

Of the Defect of Piſſing.

The Kinds;

THere is a defect alſo in Piſſing, which is a natural excretion, at certain times.

Ischuria *or not piſſing the Bladder being ful or empty.*

Somtimes it is wholly ſtopped called *Iſchuria*, with a great diſtention in the Pecten and a Tumor by reaſon of the fulneſs of the Bladder: ſomtimes without, and there is an empty bladder, and this is called alſo *Iſchuria*, but improperly.

Little and ſeldom Piſſing.

Sometimes there is not a ſufficient Evacuation by Urin, being ſeldom, or in ſmal quantity in reſpect of the drink, which is particular to the *Iſchuria* or Dropſie Aſcites. Somtimes it is with difficulty by Fits before the bladder be emptied called *Dyſuria* with pain; or by Drops called Strangury: Both which are referred to pains, when the pain is more than the difficulty.

Dyſuria *or piſſing by Fits.*

Strangury or by drops.

These come alone sometimes in them that were formerly sound: sometimes they are joyned with other Diseases, as the Colick, Stone, Dropsie, Feavers &c.

The Causes.

The cause of defect of Pissing, is either the matter, or Serum when it is not plentifully bred, or when it is carried another way, or the passage hindered. Or from the instruments of Pissing, the Reyns or Kidnies in which the Urin is seperated from the blood, or ureters by which it goeth into the Bladder; or Bladder, which receiveth it, or the Neck thereof which voideth it.

Little Serum, is the cause of little and seldom Pissing.

Or when it is carried otherwaies; it is the cause of little and seldom Pissing.

If the Serum be produced in smal quantity, it is necessary that little and seldom Pissing do follow; in people that drink little and are of a dry constitution, and use a drying Diet. But if part of the Serum, which should be attracted by the Kidneys, be carried to the habit of the Body; And there consumed with heat, or sent out by sweat, it comes to pass that they which sweat much Pis's little. And this is also from a Diarrhæa, when the Whey, or Serum is voided by stool, in abundance, or from purging. And as this is Natural and hurts not, so it is preternatural, and a Disease when it is from obstruction of the Bowels, especially the Liver which stops the Passage of the Serum: which being turned another way causeth the Dropsie ascites, in which there is little pissing. And if the Serum be not thin enough, but is hardly strained from the blood by the Kidneys, it causeth the same. This comes from things taken which thicken the blood and the Serum also; as red wine and the like, by use whereof we observe the Urin is lessened, and by the use of contraries, as hot Diuretikes, it is enlarged.

The passage of the Serum stopped, and the thickness of the serum causeth little and seldom Pissing.

Pissing is seldom stopped from the cause in the Kidneys and Vreters; for the Kidneys being two, the one being hurt, the other will supply. But it is seldom seen that both Kidneys are afflicted with the Ureters which are remote from them, so that the Function perisheth: And it cannot be but from a great cause. As the Consumption of the substance of both, as I saw once in an Anatomy; Or an obstruction in the beginning of the ureters, by matter or a stone in both together, which is seldom. Or, when in burning feavers both the ureters are dryed up, or when one ureter is wanting, or twisted and the other stopped, as I saw in an Anatomy. And if these be the Causes, and the Bladder empty, there is no pain from distention, nor desire to Pis's.

Consumption, obstruction, drying of both Kidneys, or ureters, or the absence of one ureter, is the cause of suppression of Urin.

A wound in the Bladder causeth Suppression of urin when it is empty.

There is seldom defect in pissing from the largness of the Bladder except it be wounded, as in a Fisher that pissed from a hole in his Groyn and not from the Yard. Pissing is chiefly hindered from the Neck of the Bladder when it is obstructed, and this being a narrow passage is easily stopped, or straitned by cold, and then there is pain, or by outward compression, with long sitting, or the like, in regard of the stoppage of that part between the Fundament and the Yard, through which the Urin passeth in men. Or by inward compression by the streight Gut filled with Excrements or Wind. The same may come from Inflamation of the parts adjacent, or a great Tumor. The Urin is most stopped when after long retention, the Bladder is streicked much, and the Neck thereof so contracted that it cannot be opened: This is incident to them that sit long at Banquets and are ashamed to rise and make water; or otherwise for want of a convenient place, stay so long that they cannot Pis's. Doting people that are very contemplative forget Pissing and other Functions which depend upon the will in part. Moreover in the Convulsion or twisting of the Neck of the Bladder, as we shewed in the convolvulus of the Guts, Urin may be wholly suppressed, as we shewed in the Fisherman whose bladder from a Rupture in the Groyn fel into the Cods, and lay stretched out and voided no Urin, but by a Catheter: while an ignorant Chyrurgion, let it out by cutting thereof, which gave ease to the patient, with great danger: from which being freed, he pisseth yet through a Fistula that remains, by drawing forth a tent wherewith it is stopped. If it come from obstructions of the Neck of the Bladder, it is a stone usually that stops it, if it be a great one, or a little one that passeth into the Yard in men: As we shall shew in the pains of the Reines. A *Caruncle* or *Callus*, from an Inflamation not well cured, being in the same passage causeth stoppage of Urin, as also Warts, and clotted blood and matter, though not of so long continuance other humors cannot cause it because that they come not to the Bladder, and if they do, they are so mixed with the Urin that they can get easily forth therewith.

Doting, or Delirium, is the cause of Ischuria.

Also the twisting of the Bladder by a Rupture, is the cause of Ischuria.

A Stone in the Bladder stopping it causeth Ischuria and Strangury.

An excrescence in the Neck of the bladder or humor, is the cause of Ischury or Strangury

Stupefaction of the bladder, is the cause of little and seldom Pissing.

When the Nerves of the Bladder are afflicted, and the sting is lost, the expulsive faculty acteth not, as it is the cause, as of not going to stool, so of not pissing. Also when there is no pricking of Urin and the Bladder is not ful, yet we may make water by pressing the bladder with the Muscles of the Belly: which cannot be in going to the stool, except the expulsive faculty help by our own will: because there is need of more force to send forth thick humors then Urin. Therefore though the bladder and its Neck and Sphincter be stupefied, yet Urin may be voided: as in the Palsie, and when the Sphincter is loosned there is involuntary pissing, because it is the office of that Muscle to retain, not expel the Urin.

But it is true that, if the Bladder be Stupified, we pis's more seldom: as when it is of exquisite sense, more often. Because the expulsive faculty forceth our will to make water, as we shall shew in often Pissing.

The Cure.

If Pissing be seldom, from drinking little, or dry Diet; much sweat, or purging, or in

What we must foretel and do in defect of pissing, from what cause soever.

in leſs quantity, it needs no Cure, becauſe it doth no hurt.

But if it come from ſtoppage of the bowels in dropſies: the Serum being ſo retained that they piſs leſs then they drink, which cauſeth a Tumor of the Belly; we ſhall ſhew the Cure therefore in the Dropſie.

If it come from thickneſs of the Serum, through things taken in, there muſt be a contrary Diet and thinner drink.

If from the Kidneys and Vreter on both ſides, which is ſeldom ſeen, if there be no Urin in the Bladder, it is mortal and incurable.

If from a wound of the Bladder, ſo that the Urin fals into the Belly, or comes forth at the Wound, either they die, or, as we ſhewed, there is a Fiſtula through which they piſs; but it is rare, as is alſo the bladder falling into the Cods, which had been deadly without the chance mentioned.

If it come from cold becauſe it cauſeth pain, it ſhall be mentioned there.

If from compreſſion of the Neck of the bladder, it ceaſeth when the Excrements and Wind are voided.

If Urin long held ſtretch the Bladder, and there be Inflamation or Tumor the Cure is to be applied to them. If it come from a Stone, Caruncle, or other Tumors or Humor, which ſtoppeth the paſſage, when theſe impediments are removed, the Urin is voided.

If from the Stupefaction of the bladder the piſſing be ſlower, you muſt not meddle therewith, for when it is ful it will come forth, or by ſtraining at ſtool.

Remedies to provoke Urin and help Piſſing,

We ſhall now ſhew what Medicines are to be uſed internal and external to provoke Urin in divers cauſes, eſpecially when the Serum is thick, and the paſſages about the Bowels, Reigns, Bladder and Vreters are ſtopped.

Theſe are called *Diureticks*, that cauſe it to be more, or quicker either by increaſing of the Serum, or making it thin and fluid; and ſeperated from the blood that it may paſs eaſily from the Kidneys to the bladder, or by making the Serum and Urin hotter and ſharper to ſtir up the expulſive faculty, as we ſhall ſhew.

One dram of the Powders following are to be given in a good quantity of Wine, Ale, or Milk, or other convenient Liquor: and if you will keep them long make them into Troches.

The firſt: Take *Water-creſs ſeeds one dram and an half*, Pouder them.

The ſecond: Take *Acrons and Hazel nuts dryed in an Oven, of each one dram and an half*: give it with Goats Milk, morning and evening.

The third Pouder: Take *Madder roots, Aſarum, Fennel, Parſley, Lovage, Water creſs, Nigella, winter cherry ſeeds, of each one dram; Valerian half a dram*: make a Pouder.

The fourth: Take *roots of Aſarum and Valerian, Spignel, Calamus Aromaticus, Fennel, Smallage, Purſley, Carrot, Seſeli ſeeds, of each one dram: Savin, Schenanth, Spicknard, Cinnamon, Pepper, of each half a dram: Saffron one ſcruple*: make a Pouder.

The fifth Pouder: Take *Amber, Gum of Plums and Cherries, of each one dram; Turpentine boyled half a dram, the Jews-ſtone, Alkekengi Berries, Parſley ſeeds, Aſarum roots, of each half a dram; with Cinnamon one ſcruple*: make a Pouder.

The ſixth: Take *of Egg-ſhels that are hatched, and the Skin taken out one dram, or nine ſtrins of Herrings*: give them in Pouder.

The ſeventh: Take *the Aſhes of earth Worms, or Cray-fiſh, of each one dram; of Hog-lice half a dram, Spaniſh flies, or Graſs hoppers their thin wings taken out, or Scorpions half a ſcruple, Cinnamon one dram, Cloves half a dram, Sugar two drams.*

The eight Pouder, quickly made in time of neceſſity: Take *two Cantharides, and one dram of Sugar-candy*, beat them well, give it with Honey and Water, or the Decoction of Linſeed, or with Milk.

Theſe Decoctions following are good: Take *Radiſh roots two ounces, Aſparagus and Reſt-harrow, of each one ounce; Aſarum half an ounce, Mallows, Pellitory, of each one handful; Berries of winter Cherries two drams, Water-creſs ſeeds two drams, Smallage ſeed half a dram*: boyl them in red Peaſe broath.

Or this: Take *one Onion, and a head of Garlick*: boyl them in broath, and drink it being ſtrained.

A Diuretike Oxymel is given, two ounces; with covenient Water or Wine, to provoke Urine.

Alſo Wormwood Wine, or Malmſey faſting, or white Wine, in which white Flints have been quenched till they turne to Pouder.

Or this Compoſition: Take *roots of Parſley, Fennel, Reſt-harrow, of each one ounce; Aſarum, Elicampane, of each half an ounce; Wormwood, Rue, Strawberry leaves, Savin, Hyſop, of each one handful; Broom, Elder, and Chamomil flowers, of each one pugil; Smallage, Parſley, Lovage, Rocket, Nigella, Water creſs ſeeds, of each one dram; Juniper-berries half an ounce*: Infuſe them in white Wine.

Alſo this Lixivium: Take *Juniper, Bean ſtalks and ſhales dryed*; burn them, and mix the Aſhes with *white Wine*, and ſtraining it often, make a Lie or Lixivium: Let him drink a Glaſs: And with the aſhes of Broom, or Bitter-ſweet, it is better.

Other Potions: Take *Oyl of Sulphur two drops, ſpirit of Vitriol one drop, with Wine and Water.*

Or: Take *Oyl of Scorpions half an ounce*; with *Milk* or *Wine.*

Or: Take *Oyl of ſweet Almonds two ounces*, with much Milk.

Two or three drops of Oyl of Wax, given in great Nettle water, provoketh Urin violently. The freſh juyce of Pomegranate, doth the ſame.

Or thus: Take *Horſe Radiſh roots green*, bruiſe them, ſprinkle them with Wine, and take *two ounces of the juyce.*

Or thus: Take *juyce of Pellitory two or three ounces, juyce of Water-creſſes one ounce*, add *Wine, Sugar and Honey.*

Waters pierce moſt, as that of Pellitory, Alkekengi, or Winter-cherries, Lemmons, Nuts, or of Broom flowers, with Cinnamon water, alſo of Horſe-radiſh, Water-creſſes, and Sea-fennel.

Another Water: Take *Horſe-radiſh roots half a pound, Reſt-harrow, Winter-cherries, of each four ounces; Cherries and Peach kernels, of each two ounces; Broom and Elder flowers, of each one ounce; Fennel ſeed two drams, Turpentine half an ounce, with ſpaniſh Wine*, a fingers breadth above them being bruiſed, diſtil a Water, give one or two ounces.

The water of Peach kernels, drawn with Spaniſh Wine is alſo good.

The buds of Aſparagus boyled or raw, make the Urin ſtink, and provoke it often.

Make a Sallat of Purſlane, Water-creſſes, Chervil, and Parſley, with young Onions, and Horſe-radiſh ſliced, and Cowcumbers if the ſeaſon afford them, with Vinegar and Oyl: It will provoke Urin if it be eaten for a Supper.

Or

Or this Bole. Take *Turpentine two drams, Winter-cherries one dram, Amber half a dram, with Sugar.*

Make Pils of unpleasant things. Take *Galbanum, Bdellium, Myrrh, each half a dram; Oyl of Sulphur four drops,* with *Turpentine* make *Pils,* give *half a dram* at a *Dose.*

Sometimes we mix Purgers with Diureticks, because the Urin is easier rendered when the Excrements are voided, and because they prick and stir up the expulsive faculty of the Guts, and give the same force to the Bladder.

Or this Bole. Take *Cassia new drawn half an ounce, Benedicta Laxativa, Agarick in Troches, each half a dram; Winter-cherries one scruple with Sugar.*

Turpentine doth both. Take *two drams thereof,* dissolve it with *Honey and the yolk of an Eg,* and drink it with *Wine.*

Or thus, Take *Electuary Indum the great two drams, Catholicon half an ounce, Winter-cherry water as much as will make a Potion.*

If it come from clotted blood you must give things at the mouth, which dissolve such blood, among which Amber is best in this case.

Clysters are good in this case, and Topicks to the bladder. As,

Take *Mallows with the roots, Pellitory, each one handful; Chamæmel flowers one pugil:* boyl them, and dissolve *Cassia, Benedicta Laxativa, each half an ounce; Turpentine dissolved in the yolk of an Egg, and Honey half an ounce, Oyl of Chamæmel and Scorpions, each one ounce; Salt two drams,* make a *Clyster.*

Another more compounded. Take *marsh-mallow roots, and Radishes, each two ounces; Onions, Garlick, Leeks, each one ounce; Pellitory, Water-cresses, Parsley, each one handful; Chamæmel and Melilot flowers, each one pugil; Smallage and Lovage seeds, each two drams; Juniper berries half an ounce,* boyl them in *Wine* and *Water,* and dissolve the aforesaid things therein.

Or this of Juyces. Take *Juyce of Mallows, Mercury, Pellitory, Rue, each one ounce and an half; of Water-cresses half an ounce, white Wine two ounces, Butter one ounce and an half, Honey one ounce, Salt one dram,* make a *Clyster.*

Divers things are applied outwardly to the Share neer the Bladder, that dilate it and provoke Pissing.

A Fomentation and Bath of these. Take *Valerian roote two ounces, Mallows, Mugwort, Parsley, flowers of Chamæmel, Melilot, Dill, each one pugil; Linseed and Fenugreek each one dram; Smallage seeds two drams,* boyl them, and add *Wine.* These are good when the bladder is so ful they cannot piss. Also you may add things that dissolve the clodded blood, if there be any: And Coolers if there be Inflammation.

Or this Emplaster. Take *roots of Marsh-mallows, Radish and Pellitory,* boyl them, stamp them, and add a little *Butter.*

Or. Take *Radish, Water-cresses, Garlick, Juniper-berries,* stamp them, and fry them with *Wine,* adding *Butter* and *Oyl of Scorpions.*

Hot Cow-dung also with Cummin-seed and Oyl of Scorpions.

It is good in the Strangury to boyl Hempen thred newly spun, in Water and Lie, with Mugwort and Chamæmel, and apply it.

You may use these Oyntments with the former or alone. Take *Oyl of Scorpions and Cunney grease each half an ounce.*

Or, Take *Juyce of Water-cresses, Parsley, Onions, each one ounce; Sea-fennel, Oyl of Scorpions, each two ounces;* boyl them and add *Oyl of Turpentine two drams,* and with *Cunney grease* make a *Liniment.*

Boyl *Wine Vinegar and Honey, thick, with Linseed meal,* and apply them to the *Pecten* to provoke *Urin.*

Inject with a Syringe into the bladder things that loosen the passages; as Oyl of sweet Almonds, or in which Mallows was boyled: or that prick, as Oyl of Scorpions: to cause Urin and the Stone to be voided. Or Whey or other clensers, as Honey and Aloes, if the humor be thick, or things that break the Stone. If there be a Caruncle or hardness, inject Mollifiers, and Clensers as Ægiptiacum, and after Dryers, as that of Litharge, Tutty, Antimony, Ceruss and Aloes thrust in at the end of a Wax Candle.

If the Bladder be ful of Urin, put in the Catheter, which is good in all stoppages, for it drives back the Stone, breaks the Caruncle, and dissolves clotted blood or matter, it is made hollow that the Urin may flow through it.

Chimches, Fleas, and Lice may be put into the Yard, or smal Hairs, to provoke Urin.

They say Galbanum applied like a Plaister to the top of the Yard, provokes Urin.

Also a Fume of Hedghogs bristles and Agarick, and of Graff-hoppers doth it in Women.

Sometimes the only pressing of the swollen Bladder with the hand doth it. And when a Stone is gotten into the Yard, it may be pressed out by degrees.

Sometimes they must be cut for the Stone or Caruncle, when other means fail, as we shal shew in the Stone.

CHAP. IX.

Of the Defect of Bringing forth Children, or other things.

The Kinds.

THere is a Defect of natural excretion by which a Woman sends forth, at a fit season, either a Child or a deformed Mole.

The Birth is Defective when it is difficult, as it may be preternaturally, and naturally. Or when it is not at its time appointed by nature, or before it; or when part thereof remains behind.

A natural difficult Birth.

Birth becomes difficult and painful, when it is Natural when the Child is ripe, and the Woman hath foregoing signs, by which she is provoked to hold her breath, and press the Muscles of the belly, as in other digestion: All which are increased when the Child comes forth. Also after birth some pain remains called after-pains: of which seeing they are natural to the bringing forth, we shal speak in the hurt of that Function rather than in pains.

A preternatural difficult Birth.

Sometimes Travail is not preternatural from some impediment and so with more difficulty and slower as is mentioned; in which great pain afflicteth with straining, heat, and sweating, when the Child sticks cross in the passage (where the Midwife may feel it) or when the Hand or Foot hangs out and not the Head (for when that comes first, the birth is easie) Hence it is that either the Mother or the Child often dies.

It

Birth hindered. It is said to be no Birth when the Woman goes beyond the natural time, which is usually the tenth month (though the seventh month be also allowed) and there is nothing brought forth, though the Child be ripe, or there be a mole. And then she falleth to sounding, which kind of fainting is here most deadly, through pain, labor and bleeding. Also shee hath her throws at the time, and seems to be fit for Travail, and is so disposed by the Midwife, and her Urin breaks from her, as is usual in that condition. But all these cease, and no birth followeth. And if they return not, the Child is dead, and putrifies, and breeds Feavers, and Faintings, and so infecteth the body, that the Mother dieth, as many have done (especially one who went five months beyond her time with a dead Child, and a stinking flux, with the Navel-string hanging forth, before she died) which so infected, that the Womb and Child were black and very stinking when shee was opened. And when the Mother lived shee had somtimes cleer bladders about her Navel, which signified putrefaction, through which the Back-bones of the Child were seen, and taken forth after they brake.

This causeth death as we shewed, if it be not speedily voided; and may be before the Child is perfect, and then it must be cast out presently, and it is easily done while it is little; but when it is great, there is, as we said, want of birth. As also if there be a false conception or Mole, which the sooner it is cast out, the less is the danger, therefore when we are certain thereof, if nature be slow, we help her with Medicines.

The Child is known to be dead if the Mother feel no motion, which shee formerly felt, and the belly is stil big (which often deceiveth by the Terms reteined, and these breaking forth it suddenly falleth flat) about the flanks. And if the Womb be cold and the Paps which were swollen, grow lank, At length, if it continue there followeth water, matter and filth, and pieces of the secondine hang out, there is a Feaver, Heart-pain, and Swounding. We shal shew in depravate Conception when there a Mole and no Child, and how you shal know it.

Imperfect Birth. The Birth is imperfect when the Child is voided and the Secondine remaineth whol or torn, growing to the Womb, or stopped; and causeth great danger of a Feaver, or sudden Swounding, or Death.

The Causes.

Sin. The Scripture witnesseth that natural difficulty of Travail was caused by original sin, from *Eves* fall in *Paradise*, for which the Creator was pleased to inflict pain in Travail. Yet let us shew some natural cause of both, why it should be naturally or preternaturally defective or imperfect: which is either from the greatness of the Child, Situation, or weakness, or form of the Womb, having three orifices or from streightness of the Neck thereof.

Greatness of the Child. When a Child ready to be delivered, is great (as when it can no longer be contained in the Womb, but seeks another mansion and Diet) in respect of the passages, the Delivery cannot be without pain, though it be natural. And the rather when the Child being great by the Father, is born by a little Woman which brings forth with great danger alwaies. As also when there is monstrous Conception, or many at once.

Evil position of the Child. There is also either no birth or very hard, when the decent roundness of it is changed, by breaking the coats, and flowing of water, whereby the Child comes not forth with the Head first, but the Feet, or lieth cross, or when the hands or feet which were close to the sides are stretched out.

Weakness of the Mother. And in regard the strong Throws of the Mother are required in Travail, the more couragious the Woman is, the easier is the Delivery, so they that are weak, as very young and old Women, and such as are weak-spirited and fearful, dul and sloathful, are tired out and in great danger.

The Vessels connexion not divided in the Womb. If the Vessels by which the child wrapt in Membranes with a cake of flesh in the middle cleaveth to the Womb be not ripe, they are unfit to be divided, like the stalks of unripe Apples, without tearing and force, and bleeding, (nor doth bleeding after birth, which is ordinary, come from this cause as shal be shewed) And then they growing together, and being forced before the time, the birth is more difficult, with pain, and bleeding, and Inflammation of the Womb, sometimes with a Feaver, and danger of life. The same symptomes follow when the Secundine, remaineth fast, either being whol or rent. And also after a fall, stroak, or taking of a violent medicine, there is untimely birth. Or from the violent usage of the Midwife taking these pains for Throws, they do often provoke with great danger of life. And some I have known die of the same, and some I have cured. These pains of the Womb go before Throws in many, for which they send for the Midwife which increaseth them, but should rather use hysterical means to mitigate them, for these pains do rather hinder the Throws than further them.

Sometimes there is difficulty and impossibility of bringing forth from the Orifices of the Womb within and the neck without, and the cleft of the Privities,

The inward orifice of the Womb. through which the Infant must pass. It is also no wonder if there be hard Travail when the inward orifice of the womb is so streight when the Woman is with Child, that nothing can pass in or out, and the orifice of the neck of the womb without, is no larger than to receive the yard, and they both must be so inlarged as to let the Infant pass through.

The outward orifice of the neck straitned. And the more when they are by nature straiter and harder, as in those who have not of a long time had Children, and old women, which all have hard delivery. Or if they be drier, in regard the water which moisten the passages is spent.

The straitness of the Privities. The Infant may stop in the Privities when they are too strait, or short, because they cannot be enlarged as the orifices and swel as they do in Bitches: in Women the Privity is alwaies of the same largeness, as shal be shewed in Conception.

The straitness of the neck of the womb. Also the straitness of the neck of the womb to the Privities is the cause of hard Labor, although it be large yet it must be stretched to let out the Child, and this stretching causeth pain, then (as *Rondeletius* supposeth) the separating of the Secundine from the Matrix: he was mistaken in thinking that Travail was without pain when the Secundine remained fast. For we shewed, that if the time be come, that wil separate without

pine. And I have often obſerved that the pains continued when the Secundine remained. Alſo there follows bleeding from the opening of the Menſtrual Veins in the Neck of the Womb, which is ſtretched, as in the time of the Terms. And that part of the Neck ſuffers not where it lieth under the bones of the Privities, in a ſtrait place, which alſo containeth the ſtrait Gut. Although it be larger in Women then in Men; by reaſon of the looſning and Relaxing of the Griſles which joyns the bones, and the going back of the Rump; except the Woman be ſtrait and ſhort loyned, being of little ſtature, and then the difficulty will be increaſed. And alſo when the ſtrait Gut is ful of Excrements, or the Rump preſſed in by ſitting.

Whether fat can cauſe hard Travail.

They report that fat women eſpecially about the Womb, have hard Travil, though experience teacheth the contrary; neither is there any fat in the Womb, or its Neck. And that fat which is without in the Belly cannot hinder, except it be by making them more heavy, or ſlow in the time.

The Cure.

A Prædiction.

If the Child be too big to be delivered, eſpecially if it come not from the Womb, it will die there, and the Mother will be in danger if it come forth, ſhe uſually dieth of the ſecond or third Child, if ſhe breed them ſo great. Alſo when the Child comes croſs, or the Orifices, or paſſages be ſtrait. Many women that have the Secondine growing to them after Travil, do die. If ſhe hath a mole, we ſhall ſhew in depraved Conception, what is to be foretold and done for that. In all caſes if the ſtrength be abated much, and ſhe faint, bleed, or have a Feaver, it is dangerous.

The forewarning and Cure of difficult Travil.

If theſe dangers, are feared, we muſt prevent in time, before the delivery, by a good Diet. And nothing muſt be given to provok, before the laſt month.

Let her Diet be ſparing, and of little nouriſhment, if ſhe uſe to bear great Children, and be fat: Let her abſtain from Wine, or drink it with water; let her bleed in the middle of her being with Child; and if ſhe be plethorck, let it be done again a while after, and let her not ſleep too much.

Preſently after Conception, let weak people be refreſhed with good Diet. Let the Diet be moiſt and ſlippery, if the Orifices be ſtrait, and let her uſe Baths.

In the laſt month, let things be uſed to make eaſie Deliverance, but not before the throws. Let ſome light things be given then to provoke, eſpecially Baths and Oyntments, to looſen the paſſages. Increaſing their ſtrength by degrees, as the time draws on, and when the throws come proceed to ſtrong expellers of the Child. And at laſt if the Child be certainly dead, or the Secundine not voided, uſe the ſtrongeſt things, ſuch as would have killed the Child, had it been living, and therefore were not to be uſed before. All theſe are to be performed in, and before the Birth, either by the Husband, or the Mother, or the Midwife, or by the Chyrurgion, or by the Phyſitian; by remedies taken, or applied.

Many teach, and it is agreeable to reaſon, that if a man uſe his wife often, a little before, or in time of the Birth, the Labor will be eaſie, and ſhe will be more lightſome.

Travil is quickned by the help of the Mother, if ſhe ſtand up often and walk in the laſt month up a hill, eſpecially at the time of dilivery.

The endeavor of the Mother is very neceſſary, for nature cannot do it alone, therefore ſhe muſt ſtrain and contract the Muſcles, as when ſhe goes to the ſtool. And when ſhe perceives her pains coming, being taught by the Midwife, that her delivery is at hand, (for ſhe muſt not be forced before, leaſt the Child be delivered without the Secundine, as I ſhewed. She muſt hold her breath, ſtrain and contract the Muſcles of her belly, to expel as much as poſſible, and the Midwife with others, muſt exhort her thereunto. And let her be put upon a ſtool that is hollow, and that will not keep the Rump from going back, and ſo let her lean backwards. Or if more force be required, let her ſtand up and lean, or be held up by the Arms. If fatneſs hinder, let her Face be down towards the ground, to her Knees. And let her take large ſteps when ſhe is wearied with ſtraining, and knock her Feet upon the ground; And if the Secundine be retained, or the Child come not, let her ſtamp ſtrongly, that ſhe may be delivered, as *Hippocrates* ſhews of the Tire-woman. Alſo preſſing of the belly will help the throws, with both Thumbs below the Navil, and the Hands upon the ſides, by a ſtrong woman. And the ſame is good to bring forth the Secundine after delivery.

Alſo Neeſing cauſeth ſtrong, though ſhort ſtraining by attracting of the Muſcles of the Belly, eſpecially if the Mouth be a little ſtopped and the Noſe.

Let the Midwife take half of the Child when it firſt begins to appear, and draw it gently forth by degrees preſſing the upper part of the Belly. But if it lie deep and be turned, let her put in her Fingers or Hand, being anoynted, and place it right with the Head downward, and gather the Limbs together.

If theſe ſucceed not, and the Midwife perceive the Child dead, let a Chyrurgion enlarge the Orifice with a Speculum Matricis: And if ſo it cannot be taken forth, let him pul it out with Inſtruments, or cut it out by pieces.

When all hope is gone, ſome do ſo, and keep the Mother alive. The bladders that appear in the Belly, as I ſhewed, when a Child is rotten, through which the Child may be ſeen, of which I am an Eye witneſs, gave occaſion I ſuppoſe to this way; which none attempt while the Child is alive, except both be deſperate. It is more ſafe and honorable when the Mother is dead, and the Child alive, to cut it out by opening the Belly; by which means many have been preſerved, and *Cæſar* was ſo called, becauſe he was cut out of his Mothers Womb, and thence this birth is called *Cæſarian*. Alſo we dilate the Privities to let out the Child, with an Inciſion Knife. But it is dangerous to open the Orifice of the Neck of the Womb by Inciſion. And it may be unprofitable, becauſe it hath the ſame largneſs with the paſſage.

There are alſo things given to open, and ſtir up the faculties which provoke Terms, and expel the birth; the weakeſt firſt, after ſtronger, and then ſtrongeſt which may hurt the Child; when dead, or when the Secundine is retained.

The ſtilled water of Savin, Mugwort, Mullein, Orris, white Lillies, and Chamomil.

And theſe boyled in Wine, Pennyroyal, Mugwort, Savin, Beans, Wall-flowers.

Or this Decoction: Take *Dittany half an ounce, Birthwort, Madder, Caſſia barks, of each two drams; Mugwort, Pennyroyal, Savin, of each one handful; Lavender, Chamomil, Wall-flowers, of each one pugil; Cinnamon*

three

three drams, Saffron one dram: Boyl them in white Wine.

This is ſtronger: Take *Birthwort, Sowbread, of each one dram; Savin, Tamarisk, of each two drams*: Boyl them in wine, drink it at once or twice.

Theſe juyces are good, of which you may make this Electuary to be given in Travail: Take *roots of Elicampane, Comfrey, Marſh-mallows, of each three ounces; five leaved Graſs, Bittony, Hyſop, of each one handful*; bruiſe them, and clarifie the juyce with *Sugar* and with *Cinnamon*, make an Electuary: Let her take two ſpoonfuls thrice in a day, in the morning, before ſupper, and at bed time.

Or give juyce of Savin, Mugwort, and Leeks, and of Sowbread alone, or with wine.

Let theſe Pouders be given with wine, or waters mentioned, or with Sugar made into Lozenges.

Take *the bark of Caſſia Fiſtula, white Dittany roots, of each one dram; Cinnamon half a dram, Saffron one ſcruple.*

Or thus: Take *Lavender ſeeds half a dram, Plantane and Endive ſeeds, of each two ſcruples; Cinnamon, Pepper, of each one ſcruple: Saffron half a ſcruple,*

The yellow tops of the Chives, of white Lillies, are good to be drunk, the *Italians* ſteep them in Oyl, in the Sun, and drink that.

One dram of Amber, is good when there is a Flux of blood from the retention of the Secundine, to ſtop one and expel the other.

Or this Pouder: Take *Pouder of Date ſtones and Hartshorn, Canes of Caſſia, of each one dram; Peach kernels one ounce, Cinnamon two drams, Sugar one ounce*: Let her take two or three ſpoonfuls, and drink convenient water afterwards.

This is ſtronger: Take *Borax one dram or four ſcruples, Cinnamon, Crocus, of each one ſcruple; Ginger half a ſcruple*, give it with *Cinnamon water, or Sack, or with Confection Alkermes*, in a Bolus; in the greateſt weakneſs.

Another: Take *Borax, Myrrh, Birthwort, of each half a dram; Saffron, Pepper, of each one ſcruple*: Mak a Pouder.

Theſe are good to expel a dead Child and the Secundine, *Chymical Oyl of Amber, Camphur, Savin*, anoynt the Navil with a little, and give four drops in white wine. Some commend a Medicine made of the wrappings of the Child. Let the Midwife dry the Navil ſtring and Vreter in a Oven, and to *two drams of the Pouder*, add *Cinnamon and Pepper, of each half a dram; Saffron half a ſcruple: and with juyce of Savin*; make Troches: give *two drams in Pouder alone, or with other Pouders.*

Rondeletius teacheth, that the Secundine ſo burnt and given, cureth the after pains.

Alſo *one dram, or one and an half of the Troches of Myrrh, or Gallia Moſchata*, are given with Sage, *Wine*, or made into Pills.

Theſe Pills of bitter and ſtinking ingredients are very efficacious: Take *Galbanum and Myrrh, of each one dram; round Birthwort, Dittany and Gentian, of each half a dram; Caſtor and Aſſa Fœtida, and Saffron, of each one ſcruple; with juyce of Savin*: make Pills, give from *half a dram to a dram.*

Caſſia and Tryphera looſen the Belly and cauſe eaſie deliverance thereby: And purges that are ſharp ſtirre up the expulſive faculty of the womb alſo; therefore to avoid Abortion we give no ſtrong purges.

There are divers Reſtauratives to preſerve ſtrength, which are uſeful in the throws, and to refreſh them for Labor: both for Diet and Medicine. Confection Alkermes is Cordial and ſtirs up the faculty. It is given with wine and Borax. Or: Take *the Pouder of Diamargariton Calidum, and Diamoſchu, of each half a dram*; give it with wine or water, or make Lozenges thereof.

Fumigations and ſents below, peirce into the womb and are good if made of very ſtinking things, let them be directed into the womb, by a Funnel.

Of ſweet ſcents: Take *Labdanum one dram, Storax half a dram, Muſk and Amber greaſe, of each half a ſcruple; Sugar a dram*: Make a Pouder, or Troches to be laid upon Embers.

Anoynt the Orifice of the Neck of the womb with Oyl of Spike, or put it in with bread.

Alſo the ſume of Amber, or Horſe, or Aſſe hoofs is good.

Or: Take *the Pouder of an Aſſes hoofe*, and mix it with *Horſe greaſe*, and burn it.

Or: Take *Galbanum, Myrrh, Aſphaltum, of each half a dram; Caſtor one ſcruple, and with the Gall of an Ox*: Make Troches, burn them.

Dioſcorides commends the ſum of Brim-ſtone, if the Child be dead.

The ſume of the Decoction of Dittany and Mugwort doth the ſame.

Sweet ſcents are applied to the Noſe to refreſh, nor may you fear the riſing up of the Womb, becauſe it is otherwiſe, as I ſhewed in the Suffocation of the Womb.

You muſt put into the womb things that relax and make it ſlippery, and that provoke excretion.

Of looſning things, this Decoction is beſt: Take *Marſh-mallow roots one ounce, Linſeed, and Fenugreek, of each half an ounce; Savin three drams*: Boyl and ſtrain, and add *one ounce of common Oyl or Butter, or uſe Oyl of Chamomil, or of ſweet Almonds*, by injection; *or Oyl* wherein Fenugreek hath been boyled, with *Oyl of Flower-de-luce, or Cream.*

Or thruſt greaſie wool into the Womb, dipt in Butter, Honey, Mucilage of Lin-ſeed and Goos-greaſe, with a little Saffron.

Alſo dip wool or Spunge in juyce of Leeks, Saffron, and Myrrh.

Or thus. Take *Galbanum, Opopanax diſſolved in Vinegar each three drams; Myrrh two drams, Saffron half a dram*, with *Oyl of Orris* make a *Peſſary.*

If the Child be dead, uſe juyce of Peny-royal, leſſer Centory, Leeks, Mercury.

Or a Peſſary of Dittany root, or of Madder, or Briony green, and anoynted with Oyl.

Or Take *Mercury bruiſed with Parſley as much as will make a Peſſary, Nigella ſeeds, and Sowbread roots each one dram; fil a little bag therewith.*

A ſtronger. Take *Agarick two drams, Birthwort and Aſarum roots, each one dram; Coloquintida* (which openeth the Veins very much) *one ſcruple, Myrrh three drams, juyce of Mercury boyled with Honey to a Syrup*, make *Peſſaries in Bags.*

We inject things to ſuppurate the Secundine if it come away, that it may come forth like matter, and this may be done without hurt to the Womb, for Nature ſeparates the corrupt parts from the ſound, of her ſelf.

Thus. Take *Starch one ounce, diſſolve it in the Decoction of Mallows and Lin-ſeed, adding two yolks of Eggs, and Turpentine diſſolved two drams*, inject often, adding *Honey*, alſo to cleanſe, *Baſilicon diſſolved in Milk*, or *Common Oyl* is an ordinary ripener.

Alſo Ægyptiacum when we know the Secundine is rotten

rotten by the matter that comes forth, is good with Lie to clenſe and cauſe nature to expel it.

Suppoſitories help by looſening the belly. And pricking nature to increaſe the Throws, becauſe they are neer the Womb; eſpecially Clyſters, they work better than any outward applications.

Baths are to be uſed often in the laſt month to looſen the paſſages, when a Woman is uſed to have hard Travail; made of Wormwood-water, or the Decoction of Looſners, and let the belly be anoynted with Greaſe, Butter, or Oyl.

If ſhee ſit in ſuch a Bath in the time of her Travail, or foment the Privities therewith, it will dilate and help.

If we deſire chiefly to looſen make it thus. Take *Lillies, Briony roots green, each half a pound*; *Marſh-mallows, Mallows, Pellitory, Coleworts, each one handful*; *Linſeed and Fænugreek, each half an ounce*; *Chamæmel and Melilot each one pugil*; boyl them for a *Bath* to ſit in, or a *Fomentation*. Or take *one pint thereof*, and with *Honey, juyce of Mercury, Hiera*, make a *Clyſter*.

If we wil urge forth the Child or Secundine. Take *freſh roots of Briony half a pound, of Dittany and Birthwort, each two ounces*; *Pennyroyal, Savin, Rue, Mugwort, each one handful*; *Lupines, Bay and Juniper berries bruiſed each two ounces*; *Lavender flowers three pugils*, boyl them in *Water*, add *Wine*, let it be uſed as the former. Or make a *Clyſter* therewith as the former Clyſter.

It is good to bring forth the Secundine, if you dip a Cloth in the Decoction of Birthwort, Pennyroyal, Savory, made in Wine and apply it to the belly.

If you uſe no Baths, waſh the Legs and the Thighes with the former.

Anoynt after bathing, the lower part of the belly, and the Privities, and the Loyns, and Rump.

A looſning Liniment. Take *Oyl of Lillies, Wall-flowers, Dil, Butter, Gooſe and Hens greaſe, Mucilage of Lineſeed and Fænugreek each one ounce*; with *Saffron half a dram*.

The Reſumptive Oyntment wil do the ſame.

Provoke the Child with this. Take *Oyl of Wall-flowers and Rue, each two ounces*; *Juyce of Savin and Mugwort, each one ounce and an half*; *juyce of Leeks half an ounce*, boyl them till the Juyces are conſumed, add *Myrrh and Gabanum diſſolved in Vinegar, each half an ounce, liquid Storax one dram, roots of Aſarum, Birthwort, Sowbread, each one dram*; *Cinamon half a dram, Saffron one ſcruple*, with *Wax* make an *Oyntment*.

Emplaſters work ſtronger, applied to the Navel and Share. This is beſt, *Green Leeks, and Polipody each half an ounce*; *Birthwort one ounce, Mugwort, Coleworts, Organ, Tanſie, Savory, Orris leaves, each one handful*; ſtamp them, with *one ounce of meal of Lupines*, apply it like a *Cataplaſm*, and renew it when it is dry.

Alſo Cupping-Glaſſes, Frictions, Ligatures to the Thighs and Feet, draw down and haſten the Birth.

The Vulgar commend Amulets in difficult Travail, which though they have no ſtrength, yet becauſe they encourage the woman, may help.

A Snakes Skin about her middle is moſt commended.

And Saffron about her neck, And a Load-ſtone in her hand.

Alſo the Eagle-ſtone, bound to the Thigh or ſoal of the Foot.

VVe ſhall not mention ſuperſtitious words and looks, and the giving of ſome things to be chewed by the Husband before they be applied.

CHAP. X.

Of the Defect of Vital Motion.

The Kinds,

WE call that Operation, by which all the parts of the Body live; the Vital motion or Life: The Defect of which, we cal alſo the defect of ſtrength, and is known in parts that are moved, not only in reſpect of a voluntary motion, but when all the Functions Vital and Natural are taken away, or diminiſhed, in parts movable and immovable: This is either general to the whol Body, or ſpecial to ſome parts.

VVe perceive the want of ſtrength in the whol body not only by the want of all the Functions mentioned, but by the remiſſion of the motion of the Heart and Arteries; which is either weak or ceaſeth wholly.

General weakneſs.

If the ſtrength fail in general, and the motions mentioned are ſlower, it is called a general weakneſs; which is greater or leſs, ſometimes natural from the birth, ſomtimes going before Diſeaſes, or in the beginning or end of them.

In this the whol body acteth dully and with difficulty, not as in Impotency of motion, when the Members are palſied or their actions hindered, but when the Members are faint and bruiſed more or leſs as the weakneſs is.

Then is the pulſe or beating of the Arteries diminiſhed. And either the Artery is not ſo dilated as it ought to be, which is called the little pulſe: Or when it is preſſed, it preſently ſtoppeth, and the pulſe is leſs, which is called a faint pulſe. Or the Artery extended ſlowly, and it is called a ſlow pulſe. Or it beats at a great diſtance, and is called a rare pulſe. Or it ſtoppeth one or two or more ſtroaks, and is called an intermitting pulſe. Or it is obſcure of two or three ſorts, of which there are many kinds, as the pulſe like a Mouſe-tail, Graſshopper, or Worm called *Miurus, Formicans, Vermicularis*.

Likewiſe the motion of the Heart is weak, and then the pulſe is remiſs, ſlow, and Dul. Phyſitians mention no other in the Heart, for it is ſufficient by touching the Arteries to know the vital ſtrength, eſpecially in regard the motion of the pulſe is anſwerable to that of the Heart. Alſo the Defect of the Heart is known by the breathing.

Extream weakneſs in the hour of death.

In the pangs of Death there is extream weakneſs, which is more or leſs, longer or ſhorter. In which, although the conflict between life and death, or Convulſions, the Members are moved, yet the ſtrength is gone. And the pulſe intermitteth and ceaſeth, like the flame of a Candles end, that ſomtimes blazeth with a little refreſhment from the greaſe, but goeth out again when that is wanting. And the motion of the Heart and Breathing, are much ſtirred up in the Agony before they ceaſe ſo that the whol breaſt is ſhaken, and the Noſtrils moved, the body ſweats and farteth (which cauſed the Poets to ſay the Soul went out) And death being at hand the heat leaves the external remote parts, as Hands, Feet, Noſe by degrees, and the reſt while

while the breast is warm a while; til all the breath ceaseth, the mouth and Eyes remaining open and the body turned like a clay colour, we are certain the Soul hath left the body.

Syncope or Swooning. Sometimes while the man liveth the strength is taken away for a time, and all the Functions of the whol body suddenly, Pulse and Motion ceasing, so that it cannot be felt at least. In the Disease called *Deliquium, Lipothymy,* or *Lipopsychy* in Greek; if it be great 'tis called Syncope. And then all breath is gone so that you cannot perceive it by a Feather applied to the Nose, or the like; which may be stopped (in this case only during the Fit, while the motion of the heart is staied, and hath no need of Breathing) without Death. But while the the Heart moveth it cannot want Breath, because it procureth vital spirits. In this Syncope they fall suddenly, only with a noise in the Ears or hissing, the strength being lost as in an Apoplexy, if the Syncope be great: but they differ in this, that in the Apoplexy, the Heart and Arteries beat, and they breath though with difficulty and obscurity. There is also a cold sweat called Snycoptical or Diaphoretick, not from the digested substance of solid things, but from the conflict of nature and the dissipation of the Spirits; which is so great, that not only thin humors, but also the Dung and Urin break forth. And because then heat vanisheth from the outward parts, there is a cold sweat remaining, and a paleness all over, in those places that should be red by nature, shewing it self first in the Lipps.

Particular weakness. Somtimes there is a particular weakness when the internal or external Organs are deprived, and it is called the weakness of that part; not every weakness that comes from a Disease, but as shal be shewed in the causes, that which comes from the loss of the flourishing vertue. Such as is sometimes in the Stomach, Liver, Brain, Eyes, Joynts or Members: which shal be spoken of in those accidents which are produced thereby.

The Causes.

The cause of all want of strength is in the vital spirit in man, when it is not nourished with another spirit or moisture, or consumed. The Cause of all failing of strength, fainting, and weakness of particular parts, dependeth upon the inbred and inherent spirit of the similary parts, which makes the spiritual substance of parts, as they call it, and giveth living vertue, or life, and strength, and heat, which is natural. This natural spirit or heat being inbred in every substance of parts as in the Heart (which though it abound with other, yet hath this in it as necessary for life) hath need to be continually nourished and renewed by the vital spirit, made in the left ventricle of the Heart, and communicated to all the parts by the Arteries, as to the substance of the Heart by the coronary Arteries called the influent spirit, that it might be the matter that sustains the innate spirit; and because it easily disperseth, it ought to be in great plenty through the body. And hence is it that the heart being the shop where that spirit is made, alwaies stands in need of Air and Blood whereof it is made. Wherefore if they be wanting, or but little, there is one cause why strength faileth. As when for want of breath the heart wants Air, then Death follows except its motion were hindered by other causes, as shal be shewed in the causes of swooning. Because the Heart being dilated by motion often not filled with matter for vital sprits, dieth: And this cannot befall it while it moveth not, because it may subsist a while with its own spirits, as other parts. So we shewed in a Syncope, wherein they revive after a long stopping of the breath. But seeing Blood mixed with Air in the Lungs affordeth fit matter for animal spirits, if it be consumed by great want of nourishment or Atrophy; or stopped in the Vessels, so that it cometh not to the parts, there must be weakness. But no man living can be so without blood, that the Lungs should be so empty which usual have so much; or the Vessels that are so large by which the Blood is carried with Air from the Heart, should be so obstructed. Only strength fails in this respect, that spirits are not made, or being made, they are suddenly dissipated, which causeth the innate spirits to subsist no longer. And that either when they altogether vanish and leave the body, as in the Agony of Death; or they depart for a time from the Heart and return again, as in swooning: Or when they are fewer then are necessary, as in Weakness. Also strength must needs fail when there is want of substance making moisture, in regard the innate spirit is nourished not only with the influent spirit, but by radical moisture which consumeth dayly. And so it is the occasion of Death, or Weakness, as it is wanting in the Heart (where it is the proper nourishment of the spirit) or in any other parts. But if the innate spirit called the spiritual substance of the parts, or called the natural heat be extinguished or weakened, or any part cold: Then if it be in the Heart (which hath as I shewed, its proper native heat or innate spirit besides the vital, which it aboundeth with, otherwise there had been no coronal Arteries) and be spent, Death follows, but if it be diminished, there is a general faintness of the whol body, as a particular weakness of some other member, if it be in them. But now I shal shew what causeth the dissipation of both the innate spirit called native heat, and of the Influent spirit by which it is susteined. And how the humor that feeds it is consumed by natural and adventitious courses.

The consumption of radical moisture through age is the cause of weakness. They who have more innate spirit, or natural heat, and radical moisture, are more strong and active, and they who have less, are weak, and sooner die. And when that flourishing humor is consumed like Oyl by the heat of the spirit, by degrees, in age men grow more weak and dry.

Diseases that dissipate the influent and fixed spirits are the cause of weakness. Among internal and external causes, all great Diseases dissipate the vital spirits if they continue long, and at length consume the innate spirits with the radical moisture wherewith it is joyned; from whence the weakness is more or less.

Evacuations that dissipate the natural fixed, and also the influent heat cause weakness. Great and often Evacuations either by chance, or willingly, or in Diseases, exhaust and dissipate the spirits, and abate strength, especially if good humors be voided, as Seed in the running of the Reins, or by Venery. Also great bleeding, purging by reason the stirring of the spirits abate strength, as in Diarrhœa's, and great and often sweating, and much pissing. Also the sudden effusion of things besides nature, as of Water in the Dropsie, matter in an Empie-

ma doth weaken. These violent excretions being painful, as in a Dysentery, weaken more.

Pain moving the spirits causeth weakness.

Great pain which violently stirreth the spirits, to bring them to the part afflicted with the blood, for help; causeth weakness, and if it be very great, fainting. Especialy if the part suffering, have great affinity with the Heart. Hence it is that they who have the Cardialgia or Heart pain are very weak by reason of the consent of the Stomach with the Heart, and do easily faint: this fainting is called *Cardiaca*. And so it is in other painful and long Diseases.

Pain of the Mouth of the Stomack cause of Cardiaca, or fainting.

Trembling of the Spirit, is the cause of weakness, fainting.

Great and sudden Passions of the Mind, because then the spirits are carried in and out with force, cause debility, and sometimes fainting and death; Thus we have seen some swoon with joy that hath thrown the spirits outward, and have read that others have died so. In anger the spirits are so inraged that they look red in the Face: And when the spirits presently return, as the paleness following sheweth, they are in little danger of life, but they are weakned thereby, as appears by their trembling, and there remains a weariness though anger be over. Nor is the cause of men not dying with anger as with joy, because angry men are stronger, as is supposed: in regard old men and sick men that are peevish, are easily moved to anger. But it often hapens that by great fear, the spirits being violently moved, some die and many are weakned. And shame and bashfulness may cause the same; by which they say *Homer* died. Also if the passions be of long continuance and strong; as sadness, and fear, and the like, they stir the spirits with continual Cogitation, and at length consum them, and as they say dry the bones, and this is a Consumption of the Spirits.

Heat dissipating the spirits and consuming their nourishment, is the cause of weakness.

A strong and constant heat, doth not only dissipate the spirits but consumes them, and their nourishment; as when the body is weakned by heat, fire, labor, there is fainting sometimes. And in Feavers, it is so especially in a Causon, or burning Feaver. And in a Hectick the accidental heat of the heart, though not great, yet continuing, devours the radical moisture of the heart and solid parts, and the spirits, and causeth weakness and Consumption.

Cold restraining the native heat, is the cause of weakness.

A cold distemper quencheth the native heat, or makes it less: so some have been frozen to death. And others have been killed with staying long in cold water. Also some parts are benumed and blasted with cold, or so weakned that they come not again to themselves. And this may come to the Stomach, by drinking cold water. And hither may be referred those that for want of exercise, bring not the native heat into action, and grow stupid. Also the parts grow weak, by using things inwardly and outwardly, that are Potentially cold a long time, they grow weak, but the native heat is not wholly extinct, as by actual cold. Although hitherto it hath been believed, to come from Narcoticks, that are very cold: which as we shewed, do not kil by cooling, but by stupefying the brain. Nor do we grant that the Pores being obstructed, that the heat is Suffocated for want of fanning, or Eventilation; for as we shewed, the Skin hath Pores not to let in Air, but to let out other things.

A Maligne quality affecting the Heart, or mixed with its spirits, causeth an extinction of native heat thereof, and by consequence of all the Body: or diminisheth it, and begets a Syncope, or weakness, or Death, according to its divers qualities. So when the Air is infected, men in the Plague, suddenly faint, are weak and die: or in swouning Feavers, which alwaies begin with fainting. And when Poyson is taken, or bred in the Body, it gets to the Heart, and endangers life, and causeth weakness. And this may happen to other parts, when Poyson is more contrary to them then to the Heat.

A Maligne quality in the Heart, is the Cause of weakness.

If a Wound peirce the left Ventricle of the Heart, the spirits suddenly vanish, and there is sudden Death. And if the right, or it peirce the Superficies, or cuts the Coronal Veins, they die suddenly from great bleeding. I suppose non can scape, if the substance only be hurt and divided, because a principal part cannot endure it. *Fernelius* writes that he saw one that consumed, before he died of an Ulcer in the Heart that came from an inward cause. The like may be from a Tumor, which is rare, and not known but by dissection, because the Heart feels not. I saw in 1644. in a Woman that I opened of a Dropsie in the Breast, such a swolen Heart loose and greater then it should be with the Vessels, especially the *Arteria Aorta* three times bigger then usual, and both the Ventricles, especially the left, and the Lungs and Cavity of the breast, filled with waterish blood. Also a great corruption in other parts extinguisheth the native heat.

A Wound in the Heart, is the cause of weakness and Death.

The Cure.

We shall shew how it is to be done in diverse weaknesses, and chiefly in general Imbecility and great fainting: which also may be for particular weakned parts although in their Symptoms, we shall also speak thereof. We must act and prognostick, according to the diversity of the cause, of weakness; If it come from want of Air and breathing, we shewed the Cure in the defect of Breathing. If it be from the birth or old age, we labor in Vain, because natural causes cannot be changed, nor radical moisture renewed. If it be from Evacuation, it is worst from Venery, or bleeding, which is in a Dropsie. If from sweat, it must be stopped, as we shall shew in its place. If from pain, take away the cause, and allay the pain; for pain of the Heart, causing swouning vomit, purge and strengthen the Stomach, as in *Cardialgia*; some die of joy, and that weakness which is from other passions, if it continue, especially from fear, it is hard to be Cured. If it come from a hot or cold distemper, Cure it by contraries. A Maligne quality, Plague or Poyson often killeth, for which we use Evacuations and Antidotes. A Wound in the Heart is deadly, and a corruption of the parts thereof, uncurable.

The Cure of weakness and swouning.

These things observed, though the evil be desperate, yet with Restauratives and Cordials, we may ply them to the last breath: that if there be any hope, and the weakness not fixed, cure them: And we may be the bolder if it come from Evacuation, Pain, or Passion, or after a Disease. And if there be a Syncope, we may remove it, and prevent it. Examples of all which do follow.

Let

Cordials. Let the Diet be of good juyce, and in little quantity, eaſie concocted, give them little and often. Eſpecially if old men are lately ſick, or ſuch as have had great Evacuation. And if they cannot digeſt thick, give broaths, things ſtrained, or Jellies.

A good Julep: Take *Capon broath, and boyl Riſe therein, with Borrage,* add *the yolk of an Egg, and a little Roſe Vinegar, or a little juyce of ſharp Apples, or Citrons or Wine, Marjoram, Nutmeg, Saffron and Salt.*

Or boyl and ſtrain the fleſh of a Capon in broath, and give it with the reſt.

The German diſh of yolks of Eggs, Wine, Sugar and Butter, doth reſtore excellently.

The Gravie of a roaſted Capon, mixed with the yolk of an Egg, the fat being taken off, and boyled with Nutmeg and Salt, doth the ſame.

There are divers jellies: As, Take a Capon and Mince it with a little Veal ſalted and Spiced with a little Wine, and boyl it in Balneo Mariæ, and take the juyce, and ſtrain it from the fat, and keep it till it congeal in a cold place. This may be given by it ſelf, or with others. Wine doth ſuddenly and greatly refreſh, as experience ſheweth, give it alone, or with Sugar, let it be well ſented and ſweetiſh, or mix Cinnamon therewith.

It is good in ſwouning to give a ſop in Wine, with juyce of Apples, Lemmons, Pomegranats, and Cinnamon.

The Medicines to refreſh the Spirits and preſerve them are theſe.

Take *the julep of Roſes two ounces, Cinnamon water half an ounce*; give it often

Or thus: Take *the juyce of ſweet ſented ſower Apples half an ounce, Sack and Cinamon water, of each two drams.*

Or thus in the Heart pain: Take *of Balm and Lavender flower water, of each half an ounce; Cinnamon water, juyce of Lemons, or of Apples, and Sack, of each two drams.*

Juleps are uſual in Feavers and in thirſt: As, Take *ſyrup of Violets, Bugloſs water, Lillies, of each one ounce; julep of Roſes one ounce and an half, Roſe, Bugloſs, and Balm water, of each two ounces; Cinnamon water half an ounce*: give *two or three ounces.*

A Diſtilled water to reſtore: Take *the broath of a Capon, and Oxes, or Dears Hearts well boyled, four pints; Sack one pint, an Orange or a Lemon cut in pieces, Galangal, Balm, of each one dram; Cinnamon half an ounce, Cloves two drams, Coriander and Baſil ſeeds, Roſes, Scabious and Bugloſs flowers, of each one dram; Saffron one ſcruple, Harts horn and Ivory ſhavings, of each one dram*; Diſtill a Water.

Or thus: Take *dried Citron peels, Angelica roots, Balm, Borrage flowers, Baſil ſeed, of each half a dram; Cinnamon three drams, Cloves, and ſpecies of Diamargariton Frigidum, of each one dram*: Infuſe them in *ſpirit of Wine*, give *one or two ſpoonfuls with Sugar of Roſes, or white Wine.*

Cordial Potions to be given at the point of Death, to refreſh. Take *Confectio Alchermes one ſcruple, ſpecies Diamargariton Frigidum half a dram, ſyrup of the juyce of Citrons half an ounce, ſyrup of Poppies three drams, with Roſe, Bugloſs, and Cinnamon water*, make a Cordial. This is good in extremity, with more *Poppy water.*

Or thus: which is good againſt Poyſon: Take *Confectio de Hyacintho half a dram, or Diamargariton Frigidum, Diamoſcum dulce, of each half a dram; Syrup of the juyce of Citrons one ounce, with Scabious and Balm water*: make a Potion.

Treacle is good if fainting come from Poyſon, or an evil Medicine.

Alſo Lozenges of Sugar of Roſes, and Diamargariton Frigidum.

Or theſe: Take *ſpecies of Diamargariton frigidum, of the Electuary of Gems, or Cordial ſpecies, of each half a dram; Oyl of Cinnamon four drops, Sugar diſſolved in Roſe water two ounces*: Make Lozenges.

Or: Take *Coral one dram, Precious ſtones, Pearles, Ivory, of each half a dram: Citron ſeeds, Sorrel and Baſil ſeeds, of each one ſcruple: Cinnamon, Mace, of each one dram; wood Aloes one ſcruple, Muſk two grains, with Sugar*, make a Pouder, or Lozenges.

To theſe you may add the Oyls of Pearls, Coral or the like.

Portable Gold, or ſpirits drawn called *Elixirs*, are commended by Chymiſts, to ſtrengthen and hinder old Age. And they attribute much to their holy Oyl of mans blood: Take *of a ſound mans blood, of thirty, or forty years old three pints, Sperma Ceti, Marrow of Oxe bones, of each one pound*; Diſtill them in a Lembeck well luted, keep the laſt water which is red; and they ſay will change with the Moon; give *three drops in Wine, or Cordial water.*

Sweet ſcented things, refreſh and fetch ſwouning people again, we ſhall mention ſome only to be applied to the Noſe, which are at hand.

Apply Vinegar of Roſes with a Sponge, or Cloth to the Noſe, or mix it with Penniroyal bruiſed, or Baſil: or let him ſmel to Wine.

They uſe to chew Cloves, and breath into the Mouth and Noſe of the Patient.

Or this: Take *Cloves, yellow Saunders, Roſes, of each one dram; Camphire one ſcruple*, beat them with Vinegar and apply them to the Noſe.

Or: Take *Roſe water one ounce, juyce of Apples, and Vinegar of Roſes, of each half an ounce; Cloves half a dram, Oyl of Spike one drop*: apply it to the Noſe.

Or anoynt it with Civet, or Chymical Oyls of Cloves and Cinnamon, with white Wax.

Apply Epithems to the Heart and Pulſes: As, Take *Roſe water three ounces, Wine that is ſweet ſcented two ounces, Vinegar of Roſes one ounce, juyce of ſweet Apples, or Lemmons half an ounce, Cloves one dram, Saffron one ſcruple.*

Or this: Take *water of Roſes, Balm, Scabious, of each two ounces; Vinegar of Roſes, juyce of Apples, of each one ounce; ſpecies Diamargariton frigidum one dram, Camphire one ſcruple, Saffron half a ſcruple*: Make an Epithem.

You may boyl Pouders, put into Bags, in Wine, and apply them: Take *Cloves two drams, Gallia Moſchata one dram, Saffron half a ſcruple, Baſil ſeed one ſcruple, Camphire half a ſcruple.*

Or anoynt the Pulſes: Take *Oyl of Cloves and Cinnamon, of each three drops*: and mix them with a little Wax.

Anoynt the Heart, with thoſe mentioned in the Palpitation thereof, or Oyl of Jeſemin, or Oyntment of water Lillies, or Citrine Oyntment.

Or: Take *Oyl of water Lillies two ounces, juyce of Citrons, and Vinegar of Roſes, of each half an ounce*: boyl them to a Conſiſtence: add *of all the Saunders, Roſes, and Sorrel ſeed, of each one ſcruple, Coral one dram, Pearl half a dram, Camphire half a ſcruple; with Wax*, make an Oyntment.

Or apply this Emplaiſter: Take *Treacle one dram and an half, the Cerot of Sanders half a dram, the ſpecies of Diamoſchu and Diambra, of each half a ſcruple.*

A Cordial Bag. Take *of all the Saunders each one dram; dryed Citron peels, the four cordial flowers, of Scabious and Leaves of Balm, each half a dram; Ivory or the*

Bone

Bone of a Stags heart two ſcruples, Species Diamoſchum one dram, make a little Bag, ſprinkle it with *Wine and Roſe-water,* or Fume it therewith, apply it to the heart.

It is good to raiſe them, to ſprinkle Water, and Roſe-water, and Vinegar and Wine upon the Face.

Alſo to bind the Limbs and rub them very hard.

Alſo to ſtop the Noſe and pul it, and open the mouth, and rub the Tongue.

They are ſooneſt raiſed with great Noiſe, and Neeſing.

And to place them with the Head down, and the body high.

Let them be quiet after the Fit, for weak people faint upon the leaſt motion.

CHAP. XI.

Of the Depravation of Vital Motion.

The Kinds,

IF the Vital Motion be Depraved which may be ſeen, as I ſhewed in the Voluntary and Involuntary Functions of the parts, Heart, and Arteries: we do not obſerve it as in the defect: for none can live too much, and the body and its parts cannot be too ſtrong: And if any parts that move voluntarily, move too much or wrong, that belongs to the depraved voluntary motion, of which we have ſpoken. We obſerve Depravation of Vital Motion in the pulſe of the Heart and Arteries, when it is oftener or more vehement than it ought to be by nature, or proceeds otherwiſe diſorderly.

The quick beating of the Heart and Arteries, whether great or ſmal.

Oftentimes the pulſe of the Heart and Arteries is more frequent than is fit, both in ſound and ſick, the breathing being alſo quick; and if this pulſe be great alſo, it is with pain in the Breaſt, Neck, Head, Ears. It is to be felt in thoſe parts, and by Phyſitians at the Wriſts.

Heart-beating.

Vehement and immoderate pulſation or beating of the Heart and Arteries, is a ſymptom often by it ſelf, or in cathectick Maids before they have their Terms, or ſuch as have the Hypochondriack Melancholy. This is called palpitation or trembling of the Heart, becauſe the motion is unequal. And being alwaies ſtrong, it is perceived plainly in the left ſide of the Breaſt, often in the Neck, ſomtimes under the Ribs, eſpecially on the left ſide, it is very troubleſom, and weakneth him much if it continue. Sometimes it forceth the Ribs, and as *Fernelius* ſaith puts them out of their place.

Aneuriſma

Sometimes it ſo dilateth the Artery and drives it out that it cauſeth the Tumor called *Aneuriſma*, which is great and beating. This Symptom ſomtimes remitteth and comes again ſooner or later; and it continueth longer or ſhorter time as we ſaid. I obſerved a grievous and wonderful palpitation of the Heart in the yeer 1627. in a noble Virgin of *Narbo* in *France* who was alwaies held in her fit by two ſtrong men that bare down the left ſide of her Breaſt with her hands til it ceaſed, otherwiſe ſhee complained that her Breaſt and Ribs would break.

An unevenPulſe.

An Inordinate and uneven Pulſe cauſeth trouble, but that which beats low is conſidered not as a Symptom, but only a ſign ſhewing the Diſeaſe and the ſtrength: And therefore Phyſitians feel it.

The Cauſes.

It is moſt certain that the Heart and Arteries cauſe this depraved palpitation by their motion; becauſe no other parts do beat. When theſe beat moderately, ſound people ought not to perceive it, leaſt the noiſe ſhould be a hinderance; as it is when they beat vehemently: eſpecially where the Arteries are great and many, and free, not ſunk into the Muſcles, as in the left ſide, not only by reaſon of the left Ventricle of the Heart, and the Ear that moveth it ſelf there, but by the great Artery that comes from the left ſide of the Heart, and deſcendeth by the left ſide of the Vertebræ. Alſo in both ſides of the Throat, which the great Artery aſcending goeth through being divided and there produceth the ſleeping Arteries, and thoſe of the Arms: Alſo under the Ribs eſpecially of the left ſide, becauſe the great Artery deſcending thither, lieth chiefly on the left ſide: As alſo becauſe it produceth great Arteries which accompany the branches of the Gate-vein on the right ſide, eſpecially thoſe that go to the natural bowels and the Spleen. For which cauſes, when the Arteries beat much, the pulſation is perceived on that ſide, and is troubleſome. In other places where the Arteries are leſs or hidden, though they beat ſtronger, yet are they not perceived, except it be by the pain of the part adjoyning, which is troubled at the leaſt touch of an Artery. As in pains of the Head, by reaſon of the great Ventricles of the brain beating, and in Inflammations. Or when a little Artery beating too violently in a ſtrait place, and hurts a Nerve, as in the Ears, wherein we may hear the pulſation. But in naked parts without fleſh, you may touch a pulſe and judg whether it be natural or depraved; eſpecially in the Wriſt. The trueſt cauſes of the great beating of the Heart and Arteries is the diſſipation of vital ſpirits, and the repletion and dilatation of the Arteries, among which there are others leſs probable. If the influent vital ſpirits be ſuddenly or too much diſſipated, ſo that the innate ſpirits cannot enjoy them ſufficiently, becauſe it is neceſſary that new be alwaies ſent from the Heart to the whole body, which muſt be done by the pulſation of the Heart and Arteries; It is therefore no wonder if their motion be enlarged and more quick, and if the cauſe be great more vehement with great breathing, which as is ſaid, brings matter to make vital ſpirits. And this may come alſo from the ſpirits ſtirred with the blood, the Heart and Arteries being inflamed.

The too great ſtirring of the ſpirits is the cauſe of quick & great pulſation of the Arteries.

When the ſpirits are ſuddenly toſſed hither and thither, and diſperſed, and not equally communicated to the body, the Heart and Arteries beat quick for new, and the reſpiration is greater, or otherwiſe ſtrength would fail. This comes from the motion of the body and mind as we ſhewed in quick reſpiration which comes from thence. Hence is it that the pulſation increaſeth by the paſſions of the mind, as anger, Joy, Terror, Fear, Shame, the ſpirits being moved: which *Eraſiſtratus* knew when from the ſudden motion of the pulſe from the beholding of the Nurſe that was beloved, he diſcovered a Diſeaſe to be from the mind; that is Love.

Stirring of the Spirits causeth palpitation of Heart in them that are subject thereto.

This Palpitation of the Heart is sooner in weak people and such as are disposed to it; the least exercise wil cause it in some: One confessed to me that he had it presently in the act of Venery, and was so troubled therewith that except he gave over, he should be stifled, as it fel out afterwards.

This pulsation also is greater when the spirits are dissipated from other causes, as at the point of Death, when they are vanished though there be great weaknes by which nature labors to assist them in the greatest danger, by this motion and recollection of Spirits.

Over-heating of the Spirits is the cause of quick and great pulsation.

When the Spirits grow hot with the blood, there is great motion of the Heart and Arteries, not so much because the spirits are hot and unquiet, but because they then are sooner spent, that what is suddenly lost, may be suddenly repaired. Whether it come from the external causes, as the Fire or Fume, or from internal, and the rather if the Heart grow hot, and continue so, as in a Feaver. Or if the heat come from motion of the body: or exercise in heat. Or when the mind is so affected that not only the Spirits are troubled but set on fire thereby as in anger. Or when all these concur; As we knew a Noble man that playing at Tennis, was so hot and angry, and so moved in the Pulsation and Respiration, that he could not recollect himself, nor could the motion cease, but he died suddenly.

When the Arteries are too full of blood, and too much dilated thereby (in regard they ought not to be filled as the Veins are, that there may be room for the Vital spirits) the Pulsation which before was not perceived when moderate, is felt by the Patient, and that vehement Diastole about the Heart and great Arteries, mentioned in the Palpitation of the Heart, is raised. Especially when the blood floweth to the left Ventricle of the Heart and to its Ear, which may be much enlarged, to the great Artery, whereby they are too full and extended. And it ceaseth when it flows from those parts, and doth not more lift them up and dilate them. Or it molesteth continually if an Artery be so dilated as *Fernelius* observed, Yea, that the great Tumor called *Aneurisma* doth follow. And if this *Aneurisma* be within, in any part of the great Artery, or in the breast, Throat, under the Ribs, or in the Ear of the Heart, which wil be very much stretched, it causeth a perpetual Pulsation, as an external *Aneurism*, and is the cause of that Palpitation of Heart which lasteth so long and kils so many, as some have observed in Anatomy.

Plenty and heat of Arterial blood, that fils the Arteries causeth palpitation of Heart.

It is plain that this Palpitation comes from plenty of Arterial blood, because the Arteries have nothing else in them; And *Galen* seems to grant it when he saies all such are cured or eased by bleeding. And this pulsation is greater, by how much the blood and the spirits mixed therewith, which fill the Arteries, are the hotter. *Fernelius* witnesseth that he saw such blood in the Arteries burnt like black choller. And we prove that that cholerick hot blood is gathered in the Mesaraick Arteries and and sent to the great Arteries by these Arguments. Because as such juyce as is frequently bred in the mesaraick Veins from meat and drink doth inflame & pollute the blood being carried from the branches of the Gate-vein to the hollow vein: so doth it get into the mesaraick Arteries which are joyned to those Veins, and so into the greater Arteries, and so to the Heart, and so filleth them, and doth what is mentioned. And the rather because these mesaraick Arteries are branches of the great Artery, but the meseraick Veins come not from the hollow Vein, nor are joyned to it, but by the substance of the hinder. Hence is this Disease so usual in Virgins from the stoppage of their Courses, which begets an evil habit, and in those that have Hypochondriack Melancholy. In which, as the fulnes and foulnes of the Venal and Arterial blood causeth Cachexy and Melancholy, so do they cause palpitation of the Heart and Arteries.

Some say this may be from Wind filling the Arteries, which we cannot allow, because none hath observed that the Veins can be filled therewith. Nor do we grant that vapors gathered about the Midriff, Spleen, or Womb, and so sent into the Arteries and Heart, or a thick vapor shut into the Heart, that came from another place, as some have written, can so fill it that they may cause this Pulsation. As for other causes of palpitation of which they write, especially wind or water in the *Pericardium*, we count them not the true cause of Palpitation, but of some fluctuation when the body is moved, as may appear by the noise in the breast; as we shal shew in preternatural Swoons in the body.

Other Diseases of the Heart besides these mentioned may cause it to move inordinately and quicker, as heat that moves the Spirits and disperseth them, and too great Repletion by the blood of the Arteries. Such are those, that so offend the Heart it moveth violently to cast them off, rather by a natural sensation than by feeling which the Heart wanteth.

A malign quality stirs up the Heart to palpitation.

A Venemous quality from within or without, doth cause palpitation, or any malignity in the arterial blood which fils the Arteries causeth the same by stretching them and by troubling the Heart. I understood that one who died of a continual Trembling of the Heart, had a Bone or Griftle found in his Heart.

The Cure.

The Cure when it comes from vehement motion.

That Palpitation which comes from vehement motion of mind, or body, or Heat, ceaseth when they cease, as we shewed in Short-breathing which is joyned therewith. But when many causes concur, it is dangerous as we shewed.

Cure of Palpitation of heart

When it comes from plenty of blood, it is dangerous, and lasting, and troublesom by continual motion, but wasting of the Spirits: many have dyed hereof, others have long been troubled therewith, many have been cured by removing the cause. And because the Cause is commonly about the Meseraick Vessels which are distributed in the natural parts, and there is the plethory and filth, it is cured as Cachexy Cachochymie and Hypochondriack Melancholly; which are usualy joyned therewith. By preventing too great increase of Blood, Humors, and Wind, and such humors as chiefly abound, by purging of Choler, and strengthening the natural parts, and mixing Cordials with all things. And in regard it is hard to evacuate the conjunct cause in the Arteries and Heart, we must strengthen them with Cordials. Thus.

Letting of blood except some thing hinder, is good according to *Galen*. And best from the Arteries, which will either take away the cause, or diminish it: as we shewed a Vertigo, or Giddiness is cured by opening an Artery, when it comes from such a Repletion. But it will help, if the blood be taken from the Vessels, both for the diminishing of the Anticedent cause, and because when the Veins are empty, they often fetch blood from the neighbor Arteries. Therefore the great Vein in the Arm, must be opened on the side, that beats most. And if it doth good, it must be repeated. Also open the Veins of the Legs, to draw down, especially if Terms be stopped.

It is good also to provoke the Hæmorrhoids, because we cannot draw blood directly from the Meseraicks, another way.

In Evacuations of Cacochymy, or burnt Melancholy, alwaies mix Cordials.

Prepare the Humors and open obstructions first with Clysters, then with Juleps and Decoctions, for three or four daies. Thus, Take *Syrup of the juyce of Citrons or Lemons, or Apples, of Vinegar and Bugloss, of each one ounce; Fumitory, Bugloss and Endive water, of each three ounces.*

If obstructions prevail: Take *Syrup of Maiden-hair, of the two roots, and Bugloss, of each one ounce; Balm, Rosemary and Bugloss water, of each three ounces.*

Or give this Decoction: Take *the opening roots steep them in Wine, of each half an ounce; Balm, Sage, Fumitory, Hops, Ceterach, Maiden-hair, of each one handful; Rosemary, Violets and Bugloss flowers, of each one pugil; Dodder, Sorrel and Annisseeds, of each one dram*: Boyl them, and add *juyce of Apples two ounces, and with Sugar and Cinnamon*: Give it for three or four Doses.

Or: Take *opening roots, of each half an ounce; bark of Tamarisk, Wormwood, and Balm, and Fumitory, of each three drams; Cordial flowers, Citron seeds, of each one dram,* steep them in Wine.

Purge with gentle things: Thus often, Take *Rhubarb four scruples, yellow Myrobalans two drams*: bruise them, and sprinkle a little *juyce of Citrons, or Apples* thereon, till they are soft, then infuse them in *Wine or Balm water two drams, and Cinnamon water*; strain it, and add *syrup of Roses or Manna two ounces.*

If he love a bitter Potion: Take *Rhubarb four scruples, yellow Myrobalans two drams, Agarick one dram, Senna two drams*; steep them in *Wormwood Wine.*

Or: Take *Catholicon half an ounce, Electuary of Citrons solutive two drams, syrup of Roses solutive one ounce, juyce of Apples half an ounce, with Balm and Rose-water.*

Make this Decoction for many Doses, or a syrup thereof: Take *Succory roots, Sorrel roots, of each two ounces; bark of Tamarisk half an ounce, Bugloss, Fumitory, Hops, Time, Balm, Maiden-hair, of each one handful; flowers Cordial of Scabious, Rosemary, water Lillies, of each one pugil; Annis, Purslaine and Citron seeds, of each one dram; Raisins, Tamarinds, of each one ounce; Polipody two ounces, Senna one ounce and an half,* boyl them, and add to the strained Liquor being hot, *Citron and Emblick, Myrobalans, of each three drams; Turbith two drams, or Agarick half a dram, Ginger and Spike of each half a dram,* strain it, add *syrup of Bugloss, and Roses solutive, of each two drams*; for three or four mornings, or with Sugar make a Syrup.

If he had rather take Pills, make them of the extract of Myrobalans and Rheubarb: Or, Take *yellow Myrobalans one dram and an half, Agarick and Turbith, of each one dram; Basil seed one scruple, Spike half a scruple, with juyce of Roses and Wormwood*: make a Mass, give *one dram.*

Let the Diet be temperate, by which, and blood-letting many have been cured, as *Galen* saith. Avoid things that breed Crudities and wind.

The Hearts of four footed Beasts, and of Birds often eaten do good, by Propriety. Especially if roasted with Cloves.

This Cordial water is excellent: Take *the Heart, of an Hart, Ox, or Hogg one pound*: to these add *the Hearts of Patridges; cut them small*: add these Pouders *of the Cordial flowers, Rosemary, Majoram, Balm, Basil, Harts-tongue, of each two drams; seeds of Basil, Citrons, of each one dram; Citron peels three drams, Cloves two drams, Cinnamon, Sanders, wood Aloes, of each one dram; Mace, Zedoary, of each half a dram; Saffron one scruple, Musk or Amber greese half a scruple, sprinkle them with Sack till they be like a Pulse*: Distill a water, give from *half a dram,* to *six drams, alone or with Julep of Roses, or syrup of the juyce of Citrons often.*

The Oyl of Coral, or Pearl, given with Sugar is good.

Or this Syrup: Take *of Cordial flowers, each one pugil, Balm, Basil, of each one handful; Cloves two drams*: Boyl them in *Wine* and *Water*, Clarifie them, and with *Sugar* and *Cinnamon*, Make a Syrup.

Or this of the juyces: Take *juyce of sweet Apples, Pomegranats, of each four ounces; juyce of Bugloss, Roses, of each two ounces; juyce of Citrons, Lemmons and Plantane, of each one ounce; Rose and Balm water, of each two ounces; Sugar half a pound*: boyl them to a Syrup, and add *Cinnamon and Cloves*; give *one ounce* alone, or with *Wine* or *convenient Waters.*

An excellent Wine: Take *Angelica, Elicampane, Tormentil, white Dittany, of each half an ounce; Zedoary, Galangal, of each two drams; dried Citron peels one ounce, Cloves an ounce, Cinnamon two drams, Cordial flowers, of each one dram; Rosemary and Lavender flowers, of each one dram and an half, Balm, Sage, Basil, of each two drams; Basil seeds, Marjoram and Citron seeds, of each one dram; Mirtle berries two drams,* bruise them, and add *twelve or fifteen pints of the best Wine,* keep it in a Vessel, that is first seasoned with hot Wine, wherein Cloves were boyled, or with the Pouder of Cloves. Let him drink in the morning when he takes broath, or before Dinner.

Give these Pouders with Gilly-flower water, Balm, Basil, Sorrel, Plantan or Scabious water; or make Lozenges thereof.

The first: Take *roots of Angelica, Galangal, Zedoary, Citron peels dryed, Balm, each half a dram; Basil seeds and Cloves, each one dram; Purslane seed, Mace, Cinnamon, Sanders, of each one dram; Saffron, Camphire, of each a scruple; Coral one dram*, make a Pouder, give *one dram.*

The third: Take *Coral, Pearl, Cristal, Ivory or Bone of a Stags Heart, or Unicorns horn, of each half a dram; Basil seed two scruples, Cloves one scruple*: make a Pouder.

Or give Tablets of Diamargariton frigid, Diamoschu or Diambra.

Or thus: Take *species Diamargariton frigid one dram, Species Diambra, Diamoschy, of each half a dram; Troches of Camphire half a scruple, Sugar dissolved in Rose water three ounces, Balm water two ounces, Cinnamon water one ounce*: make Lozenges and guild them.

Make Electuaries of Conserves, with syrup of Bugloss, Violets, Roses, Citrons, Sorrel, Apples and the like.

Thus: Take *the Conserve of the four Cordial flowers, of*

Sorrel

Sorrel and Balm, of each an ounce; candied Citron peels, Myrobalans, of each one ounce, candied Ginger and Nutmegs, of each two drams, of the Pouders aforeſaid two drams, with ſyrup of Apples: Make an Electuary, give *two drams*, and the *Wine* or *Waters* mentioned to be drunk after.

Confectio Alkermes, and *de Hyacintho*, and the like are good, of which we ſpeak in defect of ſtrength: Pills, Take *Amber half a dram, Smaragds, Hyacints, of each two ſcruples; Pearls one ſcruple, Baſil ſeeds one dram, Camphire half a ſcruple, with juyce of* Citrons: make a Maſs, give *half a dram.*

Bags for the Heart of red Silk quilted, ſprinkled with Wine, or Roſe water, or Balm water. Thus: Take *Citron peels, Balm, Spiknard, Baies, red Roſes, Roſemary, Lavender, Borrage, of each one dram; Baſil ſeed two drams, ſeeds of* Citrons, *Myrtle berries, of each one dram; Cuchineel half a dram, Sanders, wood Aloes, Cloves, Mace, of each half a dram; Coral one dram, precious ſtones half a dram, Troches of Camphire, Species Diambra, of each one ſcruple:* Make a Pouder for a Bag.

Anoynt the Heart and Pulſes, morning and evening, with this: Take *juyce of Mother-wort, Oyl of Spike, of each half an ounce:* boyl them a little, add *Oyl of Cloves half a ſcruple, Camphire one ſcruple, Saffron half a ſcruple, with Wax:* Make a Liniment, add a little *Muſk.*

Or this Epithem: Take *Roſe water three ounces, Balm, Lavender water, and Wine, of each one ounce and an half; Camphire one ſcruple.*

Heat Balm upon a hot Tile, and ſprinkle it with Wine and apply it to the Heart.

Perfumes go to the Heart ſpeedily: As this, Take *Balm, Baſil, Gilly flowers dried, of each two drams; Angelica roots, dryed Citron peels, of each one dram; Saffron half a ſcruple, Camphire ſix grains, tie them in a clout, and ſprinkle them with Roſe, and Balm, and Wine,* and let it be ſmelled to.

A Fomentation is good to the left ſide, with a Spung wet in this Decoction: Take *Chamomel and Melilot flowers, of each one pugil; Annis and Fennel ſeeds, of each two drams; Fenugreek half an ounce:* Boyl them in *Wine.*

It is good to rub the Limbs, eſpecially the Legs and left ſide.

And to apply Cupping-glaſſes to the left ſide, or Hypochondria.

Reſt doth allay the Palpitation, as motion increaſeth it.

Camphire hung about the Neck, is reported to be excellent.

CHAP. XII.

Of want of Appetite.

The Kinds.

WE call it a Defect, or want of Appetite, when men neither hunger nor thirſt, or when they diſdain certain things, which are to be eaten and drunk.

Anorexia, or Appetite dejected.

Some hunger not at convenient times, that is, when the Stomack is empty, and the Appetite is wholly, or for the moſt part gone, this is called *Anorexia*, and if they diſdain, or loath Meat and ſuppoſe it unpleaſant, which is pleaſant, it is called *Nauſea* and *Apoſitia*, and if all meat be refuſed, *Aſitia*. If this be in ſome men, except the cauſe be manifeſt, it preſageth Diſeaſes, becauſe all men require meat, that are ſound. In ſome it is a uſual Symptom of Diſeaſes; and therefore in Children and Beaſts, though they cannot otherwiſe declare it, we take it for a certain ſign of ſickneſs, if they refuſe to eat.

Nauſea or loathing.

Apoſia, or not drinking.

If they thirſt not, and refuſe all drink, it is called *Oligopoſia*, or *Apoſia*, this is rare, for though ſome found men drink little, and live upon moiſt meats, which is ſeldom; yet is it ordinary that they which deſire no meat, deſire drink, and they which Eate deſire drink. In Diſeaſes though the appetite of meat be dejected, yet they are ſo far from being not thirſty, that they are very dry, ſo that they had rather have moiſt things then other.

Loathing of ſome Meats.

It uſually happens that things that are uſually eaten, and are pleaſant to the taſt, as moſt nouriſhments are, and ſower ſweets that are clean and good, are diſdained of ſome; And this is either by an averſneſs of nature, to ſome things which abhors them, and by which they receive hurt, as we have known by many concerning Cheeſe, who though they eate Milke and Butter, they diſdain. Others hate Wine by nature called *Abſtemious* men, from *Abs* which ſignifyeth without, and *Temetum* which ſignifyeth Wine. Others hate other things. This is alſo uſual in Diſeaſes, they hate ſome meats, that nouriſh, and not only for being fleſhy, fat, and unctious, but for the ſcent. Alſo ſweet things, which moſt love, are diſdained by them, and Wine. Others refuſe things offered from a diſtaſte, ſuppoſing their taſt to be otherwiſe, as we ſhewed in Drepraved Taſt.

The Cauſes.

In regard the Stomach deſires by its natural ſenſe, Meat and Drink, it is neceſſary that it ſhould be afflicted in all kinds of defect of Appetite, ſo that it either looſeth ſenſe of hunger, or thirſt, wholly, or in part, or is afflicted with a contrary ſenſe, and loathing of all Meats, or of ſome. This may be from the lighteſt afflictions of the Stomach, becauſe the Stomach muſt be well conſtituted, that it may rightly hunger, or thirſt, and therefore this Diſeaſe is ſo frequent, both in ſound and ſick. And it is either from its conſtitution, or Repletion, or Offenſe, or Diſtemper, or Weakneſs.

A certain conſtitution of the Stomack, is the cauſe of loathing of divers Meats.

The Stomach hath originally ſuch a conſtitution, or temperature many times, from innate cauſes, that it diſdaineth ſome things, as Cheeſe, or Wine, which other natures abhor not. Which temperature we cannot deſcribe, but that it delights in ſome meats and refuſeth other, as ſome creatures can digeſt things that a man cannot, as Birds do Stones, and Eſtridges Iron. Yet the Apprehenſion of the Mother being with Child, hath been a cauſe, from her diſlike, and loathing of certain Meats, eſpecially if ſhe were troubled with the *Pica*, or longing which made an impreſſion upon the Child. And we have ſeen Children refuſe the ſame, as ſoon as they were born this loathing they bring with them into the world. Alſo we find that the conſtitution of the Stomach in other cauſes,

Apprehenſion, is the cauſe of loathing of ſome Meats.

cauſes, is ſo changed by apprehenſion that it refuſeth thoſe meats that it is wont to take, becauſe they have been taken either immoderately, or indecently, or uncleanly. Or becauſe in Diſeaſes, they have been abhorred; as after a Feaver, we have known ſome long abſtain from Fleſh, others never eat any more thereof.

Want of Cuſtom is the cauſe of Loathing.

Cuſtom is another nature, and therefore we delight in things we have uſually eaten from Infancy, and abhor things that are univerſal, though rare and Savory: And this is the cauſe why divers kinds of Creatures are not uſed but in extremity, and that they who uſe themſelves to eat Frogs and Snails, take delight therein, which cauſe Loathſomneſs to thoſe that never eat them before. And why? Raw fleſh and the like unclean things are nauſeous to people that are uſed to a clean Diet.

Repletion of the Stomach which ſtupifieth the ſenſe thereof, takes away appetite which is cauſed by the Chyle which it maketh, and retaineth too long: as when it is cleanſed from the Chyle, it deſireth more meat to make new; therefore while the old Chyle remaineth, it deſireth no more meat; And this comes from the defect of diſtribution of the Chyle, from the Obſtruction of the Meſeraick Veins, from abundance of blood in the Meſeraicks and the Stomach, therefore when they ſuck little or not at all, there is little or no Appetite; becauſe the Stomach being full of blood deſires no new juyce. As in plethorick men that exerciſe not (in regard the ſubſtance of the body conſumeth ſlowly, they have no ſuch need of other juyce, being it is ſlowly diſtributed) theſe hunger little, except they have gotten preternatural hunger from a cuſtom of gorging.

Slime, Fat, or Humors in the Stomach cauſe want of Appetite.

The ſame comes from a ſtuffing of the Stomach with humors: As when it abounds with Slime, with which the Guts are naturally anointed and the ſtomach alſo, and which the Butchers uſe to ſcrape away when they waſh them; Then the Stomach being covered with this ſlime waxing hard, loſeth ſenſe, and is ſatisfied therwith being ſweet, & not ſo diſagreeing as Chyle. Fat and clammy meats cauſe this, uſed immoderately. Alſo this want of Appetite may come from fat which groweth on the left ſide of the ſtomachs bottom, where it is found in Anatomies; or about the orifice thereof as *Fernelius* obſerveth. Alſo if any other humor, or crude excrement, unlavory, wateriſh, or ſlimy, or flegmtaick, bred of meat or drink, or flowing thither from another part, fill the ſtomach or ſtick faſt thereto, it deſtroyeth appetite in the like manner: And if the ſtomach be continually moiſtned thereby, they never thirſt.

Moiſtneſs of Stomach cauſeth want of Thirſt.

Offence of the ſtomach cauſeth loathing of ſome meats.

If the ſtomach be greatly offended it cauſeth vomiting, if but a little, an inclination to vomit, which is loathing called *Nauſea*, by which it diſdaineth things therein, and which ought to be taken. This may come from ſharp meats, Medicines and Poyſons. Eſpecially from Choler, Yellow, Green, or Black, in many Diſeaſes that come thereof; or other humors, bred in the ſtomack or brought thither.

Heat of the ſtomach cauſeth want of Appetite.

A hot diſtemper of the ſtomach taketh away appetite not only by relaxing it, but by cauſing Thirſt; becauſe Thirſt and Hunger cannot meet together in the Stomach and when one prevaileth, the other is quiet, as we ſhewed. Alſo if the body be ſo hot from an internal or external cauſe, ſo that the ſtomach be inflamed, which cauſeth Thirſt, they deſire drink rather than meat: And if they uſe hot meats, when the ſtomach is empty as when ſtrong Wine is drunk at meat, or ſweet or ſpiced things be eaten firſt, they loſe Appetite. And in all hot Diſeaſes in which either the ſtomach alone or with other bowels adjacent, or the whol body, as in Feavers is inflamed, the appetite is caſt down.

Weakneſs of the Stomach cauſeth want of Appetite.

Other Weakneſſes which hinder Concoction, and diſtribution, take away appetite which ſerveth them. And if they be right the appetite is good. Theſe come from the birth, or age, or great Diſeaſes, and the Stomach digeſteth ſlowly, and leſs deſireth meat. And paſſions of the mind alſo ceaſeth the Cardialgia or Stomach-pain, and they who are grieved in mind, and ſad at heart loſe appetite. And in regard the Stomach being very ſenſible, conſenteth with ſo many darts, it cometh to paſs that the appetite is gone in divers Diſeaſes of other parts.

Dulneſs of the Stomach cauſeth want of Appetite

Alſo if from ſtupefaction of the ſtomach in the ſenſe of touching which is joyned with Taſting, it be decayed, there is no appetite: This may come from the uſe of Narcoticks, eſpecially from the Decoction of Nightſhade in Wine, which *Matthiolus* ſaith cureth the Glutton. And I ſuppoſe the reaſon why Drunkards eat ſo little, is not the heat of the Wine, but the ſtupefactive quality thereof.

The Leaven or Ferment of the Stomach being conſumed cauſeth want of Appetite.

That natural Ferment or ſharp juyce which is in the Stomach for Concoction, is the cauſe of want of Appetite in Man or Beaſt.

The Cure.

The Cure of Appetite dejected and loathing of Meat and Drink.

When ſound men want Appetite and eat not with delight, it muſt be cured, but in other Diſeaſes which have greater accidents it is not ſo much regarded, eſpecially when eating wil do hurt: And when the Diſeaſe being cured it wil return, though it be laſt, and that by which we diſcover health. Want of Thirſt, in regard it hurts not of its own ſelf, is cured if it be preternatural, by no other than taking away the cauſe in the Stomach which breedeth other inconveniences. *Nauſea* or Loathing both in the ſound and ſick if it incline to Vomiting, muſt be cured as we have ſhewed in Vomiting. It is hard to cure the loathing of ſome meats, which is natural from the Birth. In all theſe kinds of what cauſe ſoever, we muſt uſe theſe divers Medicines.

Cuſtom is of great conſequence to keep up appetite at a certain time; therefore keeping conſtant meals accuſtometh nature to an appetite. And without that there is a confuſion as in other operations of nature. And as we ſhewed in the cauſes, cuſtom is the cauſe of loving and loathing of ſome things, we may alter it to the contrary by degrees, perſwaſions, and deceits, as we have ſeen in them that have hated Wine or Cheeſe. Faſting is good if it come from Repletion of meat, or Chyle, or abundance of Blood, or Fat; or when the ſtomach is foul with ſlime, or wet with water; for it wil conſume them all, and they wil be taken away by

by the Meſeraicks which are not idle: But it is worſt in Choler abounding.

Moderate exercciſe, and ſtrong in thoſe that can endure it, ſtirreth up all the Functions, and Appetite, by diſtributing the meat, rather then Concoction. This muſt be before meat, hence ſome laboring men eat three or four times in a day: and they who are idle, ſcarſe once; in ſick people that cannot excerciſe, Frictions are good.

They ſay ſleep takes of loathing, but it provoketh not Appetite, but by accident, becauſe diſtribution of the chile is rather in the time of waking, and that done the Appetite preſently returns. Therefore we ſooner hunger being awake, between meals, in the day time, then in the night.

Vomiting is good, if it proceed from Excrements, Humors, or Choller, or the like in the Stomach. And if they ſtick faſt, it muſt be cauſed by ſharp cleanſers, as Oxymel, and Syrup of Vineger, with other Liquors.

If Vomiting doth it not, Purge the Stomach, eſpecially with bitter things, which cleanſe and ſtrengthen it, with Aloes, Pills of *Hiera*, *Alephangine*.

Or thus in any Humor: Take *Rheubarb*, *Citrine Myrobalans*, *of each one dram*; *ſpecies Hiera two drams*, *Maſtick*, *white Sanders*, *of each half a ſcruple*; *with ſyrup of Wormwood*: Make a Maſs, give *one dram*, or ſharpen them with *Diagredium*.

Or give Wormwood Wine, with Rhubarb, Myrobalans and Senna, and if Flegm prevail, with Agarick infuſed.

Other things reſtore Appetite, by cooling, if it be loſt by heat, either actually, or Potentially, eſpecially ſower things, which allay the ſharpneſs of Choller, if that be the cauſe. Others prick and ſtir up the Stomach, by a propriety, as ſhall be ſhewed in Depraved Appetite. As the ſharpneſs of Melancholly juyces, from the Spleen, is ſuppoſed to do; But we impute that rather to the ſharpneſs of the chile, and its natural Fermentation, of which we ſpake formerly, in regard every Vomiting, if not after Wine, is ſower; eſpecially if ſower things have been taken: which take away the force of ſtupefying Narcoticks. Alſo others do it by cleanſing, as Salt things which purge ſlime, and ſweet juyce, and prick the Stomach. Bitter things do the ſame, by cleanſing Flegm, and Choller, which deject the Appetite. Others do it by an unknown property. Things pleaſant to the taſt, ſtir it up chiefly, and abate loathing. Therefore in Feavers they refuſe ſweet, and deſire ſharp things, and a little Salt. Alſo ſtrengtheners of the Stomack, take away loathing, but theſe are beſt when it is weak; they are hot and aſtringent, and theſe cauſe thirſt.

If Appetite be loſt from heat, let the meat and drink be actually cold.

Cold Water is good before Meat.

And they who drink water have the beſt Stomackes; therefore beaſts that eat crude things, and drink water, eat ſo much.

Let the meat be ſeaſoned, with the juyce of ſower Fruits; as of green Grapes.

Alſo let the bread be well Leavened, and Salted.

And in hot Natures let ſharp wine be given to thoſe that have uſed Wine.

Uſe Vinegar in Broaths, and Salats; or drink it before meat.

If loathing come from drinking Wine, with Night-ſhade boyled there in, give Vingar; or if it come from other Narcoticks.

Peaches that are green, are good in a hot cauſe, uſe Oranges, and Lemmons ſliced, with Roſe water, and Sugar.

Alſo the *German* Sallats, of Pickler, Colewarts, and Turneps.

Alſo Sorrel, and Purſlain, with Vinegar.

Alſo Olives, and Cappars for ſallats.

Garlick is good to get an Appetite. Thus, ſtamp Garlick, and mix crums of Bread, and ſweet Almonds therewith, and give it with broath.

Drink Wormwood Wine before Meat, if it come not from heat, it is good in all other caſes.

Alſo give the Eſſence, or Tincture of Wormwood, Zedoary, Maſter-wort, and Saffron before Meat, with Broath or Wine.

Alſo Syrup of Peaches, juyce of Citrons, Pomegranates, Currans, Grapes, Sorrel, Vinegar, and Sugar, of Wormwood boyled with Vinegar are good.

Or thus: Take *juyce of Peaches one pint*, *of Pomegranates, and ſower Apples four ounces*, *juyce of Citrons two ounces*: boyl them with *Vinegar* and *Sugar*: give *one ounce*.

Or this Electuary which cleanſeth: Take *Honey one pound*, ſcum it, add *juyce of Pellitory, and Wormwood, of each four ounces*: Boyl them, give morning and Evening as much as a Cheſnut.

Or, *Conſerve of Roſes, Sorrel, Currans, of each one ounce*.

Chamomel water drunk provokes Apetite.

Things that ſtrengthen ſhall be after mentioned, among which Pepper is commended, by *Dioſcorides*. Alſo Pouder of Maſterwort, and Hens gizard skins which help Concoction and Apetite, and a Sopp in Sack; ſeaſon the meat, with Mints, Calamints, &c. theſe take away *Apoſia*, or want of thirſt.

Cleanſing Clyſters are good, when the Stomach is foul: as that of the Urin of a Boy, or gentle Lixivium.

Alſo: Take *white Beets, with the roots, Mercury, Colewarts, of each one handful*; *Barley one pugil*, *Agarick one dram*, *Senna two drams*, *Carva ſeeds one dram*: Boyl them, and add *the urin of a Boy, or Lixivium four ounces*; ſtrain it, and diſſolve *juyce of Mercury, or Beets one ounce*; *Honey one ounce and an half*, *Salt one dram*; give it without Oyl that it may cleanſe well.

If it come from heat in a Feaver, give cooling Clyſters: As, Take *Lettice*, *Endive and Violet water, of each four ounces*; *juyce of Purſlane*, *Lettice*, *of each one ounce*; *Oyl of Lillies*, *Violet*, *of each half an ounce*.

Sweet ſents correct Loathing, as we ſhall ſhew in ſtopping of Vomiting; as of Vinegar, ſower Fruits, Wormwood.

Apply to ſtrengthen the Stomach, cold or hot aſtringents, as the cauſe is: Take heed of Oyly ſents that are unpleaſant, as we ſhewed in other Symptoms of the Stomach.

Uſe the Epithems that are preſcribed to cool the Liver, if Loathing come from a hot cauſe, as in Feavers.

External cooling of the Body, is good in a hot cauſe, as cool Air, is better then hot; alſo Bath, and waſh the Feet in cold water: Alſo change the Shirts and Linnen often, to get an Appetite.

It is good to let blood, if there be Plethory, and if the Diſeaſe, of which want of Appetite is a Symptom, will permit.

CHAP. XIII.

Of Depraved Appetite.

The Kinds,

WE say the Appetite is Depraved, if they desire Meat or Drink more immoderately than is natural, or when they desire other things besides meat and drink.

Boulimos or great Appetite. There is immoderate hunger, when more meat than is fit is desired, when they are not satisfied, or desire more before the first is concocted. This is sometimes in sound men, sometimes the symptom of a Disease called *Boulimos*, or insatiable hunger; with other accidents somtimes, as heavinesse of the stomach from great gorging til it is digested.

Dogs Appetite. Others take more than they can bear, and vomit it up again as a Dog doth; some-have a Loosnesse after gorging which carrieth it away. Others faint if they eat not presenly and swound and die: this comes to some from weakness and pain in the Cardialgia, the Appetite being rather abated than increased, and if they have been long so, they have a weak stomach and loathing.

Immoderate Thirst. They Thirst immoderately who desire drink much between meals, or when they cannot quench thirst. It is usual with sick and sound, and intolleratble, worse than Hunger, because the want of things that quickly satisfie and cause sudden delight doth more afflict than the want of those that do it slowly. Therefore in Feavers they complain most thereof and in other diseases; They that are thus, spet white and froathy and speak with difficulty and stammer, because their Tongues (as they say) stick to their mouthes, and if they want Drink they faint.

Pica. When People desire other things besides meat and drink, it is called a vicious Appetite, or *Pica*. Men have it seldome, but Women with child often, in the first month somtimes,

Malacia. and then it is called *Malacia*, and it is sometimes in the Green-Sickness in Maids.

There are divers kinds hereof according to the diversity of things desired, some love raw flesh like Men-eaters, some have been like beasts and bitten peoples Arms by violence. Others desire and eat Sawces and Sallets, and Spices in abundance without hurt, as one that eat pounds of Ginger, another that drank Vinegar in abundance, and the like. And another that came to me, being an Hostess that eat abundance of Pepper, without any hurt or heat of the stomach. Commonly they love dry things as Meal, Ashes, Chalk, Clay, Shels, old Rags, and Leather; which they eat with great delight. And *Fernelius* mentions one who eat abundance of unslaked Lime without hurt.

The Causes.

All immoderate Hunger or Thirst comes from a natural cause, that is from the natural Appetite, which if immoderate is preternatural, as from the sense of the stomach from want of nourishment or moisture. Somtimes this overgreat and strange appetite is from a preternatural cause, as a cold and dry distemper of the stomach or other quality.

Exquisite sense of the stomach causeth too great Appetite. The stomach desireth from sense which is mixed with Touching and Tasting and if it be exquisite it is easily afflicted, and feels a Defect, and desires more. This is

Or Evil Custom. from the Birth in some who eat more then others from the Cradle; some have it from a custom of gorging continually not suffering the stomach to be empty; and except it be ful alwaies, crave; as Gluttons, who serve their bellies night and day not so much from pleasure as from custom, or inbred ravening.

Want of Appetite. Want of nourishment which is dayly consumed as it causeth a natural hunger; so if it continue long it makes people ravenous. This is from a long want of meat, or because they have eaten things of small nourishment and quick digestion; or because they have long sickness, and want of Appetite eaten little or nothing: therefore upon recovery they are greedy. And when they have eaten, nature suddenly draws away the Chyle, which causeth them to be usually costive as I shewed in the suppression of the Belly; they are presently hungry again, and if they moderate not themselves, they get hurt and the accidents of *Boulimos* mentioned, and relapse into their Disease.

Distribution of the Chyle too soon causeth quick Appetite. If the Chyle be snatched from the stomach too soon by exercise evacuation, sweats, the same happens. Or if the Chyle be wasted too much as *Rondoletius* observes with moist meats or drinks, and stay not in the stomach but descends presently. Or if it be snatcht away by Worms as they say, which must needs be very many to cause such a Disease. Some suppose it comes from the broad Worm, which is longest if it be so, it is not because the Worm-seeds upon Chyle which is not alive as I shewed, but because the Chyle breeds it.

Want of moisture in the stomach cause of Thirst. As a natural Thirst is for want of moisture, is so the preternatural when it is long absent: And this is like Hunger for want of meat, when drink hath long been wanting or not actually cold which quencheth Thirst the best. This may be also from long Spetting which drieth the mouth and stomach; Hence they say much talking which causeth spetting causeth Thirst.

Cooling of a hot stomach restoreth Appetite. Some say that a cold distemper of the stomach causeth immoderate Appetite, because they saw some who lived in a cold Air and drank cold water eat very much. But in regard cold doth not whet the sense but blunt it, we propound another cause if the stomach be hot, and the Appetite lost therby, as we shewed cold by correcting the Heat, and bringing the stomach to its natural temper, provoketh Appetite, rather than causing a cold distemper. And because in Winter through outward cold in cold countries, the heat is driven in and there contracted as *Hippocrates* saith, the stomach is more hot, men need more meat, And therefore desire more meat: so, that as the same *Hippocrates* saith they that grow have more natural heat which increaseth the Appetite, and Cold diminisheth it. This being so, neither doth a sharp humor cause a Dog-like Appetite, although it may restore a dejected Appetite, and raise the stomach, as we shewed in defect of Appetite. Nor can a Melancholick or

flegma-

flegmatick Humor as they suppose, do the same by coldness or sharpness,

Drineſs of the Stomach cauſeth Thirſt preternatural.

Drineſs of the inward coat thereof, which goeth to the Gullet and Jaws if it be in any part thereof, causeth preternatural thirst, as only the want of natural moisture causeth thirst. And the greater the drineſs, the more the thirst. Heat causeth it by consuming the moisture, and the thirst is greater, because the stomach being hot also, desires cold as wel as moisture; As when the whol body is inflamed and the stomach by the same, Bathes, motion of body or mind, and in Feavers, there is great thirst, And if the heat be great the heat is intollerable: Or if the stomach only be inflamed from things taken in, as Wine, sweet things or Spices, or with sharp things, Herbs, rotten Cheese, or the like, all these taken intemperately cause a preternatural thirst. Also from the Heat of a Purge there is thirst. Also Choler in the Stomach from meats eaten, or sent thither in Diseases causeth thirst, and the greater when it is hotter. And this may also come from hot vapors sent thither: And from things which only dry and do not (of their own nature) heat as all Salt things and such as are smoak-dryed: Also by Air long taken in with an open mouth, because it drieth the Jawes and the stomach by consequence. Some write that thirst may come from the heat and drineſs of the Wind-pipe and Lungs, to the Stomach. But, in regard the Lungs want sense of feeling, if thirst come them or from other Diseases of the Breast, it is from the consent of the Tunicle of the Stomach, Gullet, and Wind-pipe, that the stomach is affected: Or by reason of much spitting, or from a Feaver. Neither doth white spittle signifie that it comes from the Lungs; for the same may be made in the mouth from drineſs, and Air.

An occult quality in the Stomach is the cauſe of Dog-like Appetite.

If any quality or propriety alter the stomach; so as to raise the Appetite, it is the cause of disorderly Appetite, as we observe by melancholick humors which breed in the mesaraicks and mix with the blood, and get into the stomach by the Veins of the Spleen and other branches of the Gate-vein: which cause it not so much from sharpness which is in melancholy, and astringeth the stomach which causeth appetite; as from an hidden quality, which stirs up immoderate sence: which we conjecture to be so, because, sour things that bind prick, nor cold, as we shewed, nor other quality manifest, can so stir up the function, as to increase, but rather allay appetite; except there be some hidden force in the humor. As those humors which Physitians cal melancholly, corrupted, and burnt to ashes can put on divers venemous qualities, and cause Dog-like Appetite or *Pica* which is a desire of abominable things. And

An occult quality in the ſtomach is the cauſe of Pica.

Poyſons cauſe Boulinos *and Thirſt.*

therefore the cause of these is a venemous force, which is better known by the effect than described, in the humors sent to, or bred in the stomach, As *Dioscorides* speaks of some Poysons that touchedor taken in do the same; or cause thirst as the biting of the Serpent *Dipsas*; such humors *Galen* saith may breed in the body and be turned into Poyson. That it is no wonder that women with Child and Virgins that want their Terms should have the *Pica*. Or others a depraved appetite from a Cacochymy or evil juyce.

The Cure.

The Cure of Boulimos *or great Appetite of Thirſt and* Pica.

Of the three kinds of evil Appetite if Hunger or Thirst cannot be satisfied, or if it be they are sick or pained at heart, or Vomit, or purge; or if they be weak and faint for being satisfied; this is to be cured. And it is more easily done in Hunger than Thirst, and great Hunger is easier taken away than satisfied. When strange things are desired that must not be neglected, because it signifieth a preternatural cause in the body: as also because they delight in such things and think they cannot hurt, which they find otherwise.

First be temperate in eating and drinking, not too much nor too little; especially after long fasting and sickness, and then take a little and often, such as is of good juyce and nourisheth wel and is easily concocted. In other causes, eat things that fil much and are solid, and not soon digested, yet in small quantity; for as an evil custom maketh Gluttons and Drunkards, that they are not well except ful, so a good and decent custom takes away immoderate appetite, and brings it into good order.

Vomiting is good if there be an evil humor that causeth it, and if it come not of it self, provoke it. And in Dogs Appetite, at the first, before it is too violent, provoke it to take away the cause. In other cases vomiting increaseth it, except it come from choler; In which also thirst is raised, which ceaseth when that is spent.

Purging is good in these cases mentioned both against Thirst and Hunger, not in other, except there be a Diarrhæa, in which you must help nature to take away the cause, with things that are gentle and astringe; First preparing the Humor. All these we choose, by other observations than by the sharpness of flegm or melancholly. And though purging cause thirst, if it come from Choler they may be used. If it come from Worms give bitter things to drive them down.

We use hot and dry things for the stomach when this Disease comes from humors after they are purged. Which do not alter the coldness of the stomach, but heat and dry it, causing thirst, which cureth hunger: give meat actually and potentially hot, spiced, and sweetned, which are best fasting. And sweet Wine that is strong and spiced, and *Aqua vitæ* which the labouring people drink in the morning, that they may better endure hunger. Also hot medicines for the stomach, as sweet, sharp, burning, and wel scented: Or anoynt foment or Plaister the stomach with hot things. Or use exercise and Baths.

Things that loosen, or are fat or viscous, subvert the stomack, and by greasing it take away the sense, and Appetite, as Butter, Oyl, Fat, Glutinous, as Calfes, and Sheps Feet, and if they be loathsom they are the better; as they speak of roasted Dormice.

Things take away Apperite by propriety, by their adverse force, or loathsomness. As Wine in which an Ele hath been drowned, causeth men alwaies to loath Wine: But this must do it by another quality, if they that are ignorant of it are cured thereby. Antidotes do the like, if it come from venom. Others stupifie the sense of the stomach, as we shewed in the causes of dejected Appetite. And Wine or sprit thereof taken fasting, doth the same, not by heating, but stupifying. And the infusion of nightshade roots in Wine; Also

Treacle

Treacle and Mithridate, with Wine, are ſtupifying by reaſon of the Opium; And other Opiates, though no Antidotes, abate Appetite, but it will return again by taking Vinegar.

Cold and moiſt things, Cure all ſorts of thirſt; And *Rhazis* ſaith, that cold, or cold water hurts the actions of the Stomach, largely taken, and cold Air cures Hunger.

Drink doth this chiefly by wetting the dry Belly, if it be actuallycold and potentially alſo.

Water actually cold (which we ſhewed to be potentially temperate) is beſt, either crude or boyled to take away the windines. Or with four Juyces, or Vinegar, or with Spirit of Vitriol-waters cure Thirſt.

Wine may be given to them that are uſed to it, eſpecially if ſmall, or mixed with Water.

Alſo Milk to young Children, and ſuch as uſe it, and Whey: But they are prohibited in Diſeaſes in which they corrupt eaſily.

An Emulſion of ſweet Almonds in water, called Almond-milk, is pleaſant.

Or Decoctions, as that of Barley-water, or beaten Bread, or of cold Seeds, or of Prunes, Cherries, Rayſons, with Cinnamon, Aniſe, Fennel, &c.

Broaths of Fleſh-Capons, let the Fat be taken off, reſtore and quench Thirſt.

Beere or Ptiſan, with Juyces. As, Take *Water two quarts, Juyce of Pomegranates, or Grapes two ounces, Sugar half an ounce*: boyl them a little.

Or of diſtilled Waters. Take *Sorrel, and Endive, water, each two pints, Juyce of Currance, and Grapes, or Pomegranates, each three ounces; Juyce of Lemmons, or Apples*: boyl them, and ſweeten them a little.

Julep Alexandrinum. Take *Roſe-water one pint, Sugar half a pound*: boyl them to a conſiſtance, add Water boyled.

Or thus: Take *Water one pint, Roſe-water four ounces, Juyces of Cherries, or Grapes two ounces, Sugar four ounces*: boyl them.

Sharp Syrups, as of Currance, or Gooſ-berries, Grapes, Medlars, Cherries, Prunes, Pomegranates, Sorrel, or Vinegar, with Water or diſtilled Waters, or Syrup of Violets.

The Juyce of ripe Anguriæ, or Pomegranates, is good.

Other ſolid things to chew, made of Sorrel, or wood-ſorrel, Lettice, Purſlane, Endive, Succory, Bugloſs-flowers in Sallets.

Coleworts, Rapes, Apples boyled, Bar-berries.

Medlars, Peaches, Apples, Cherries, Prunes, Pomegranates, Bar-berries, Grapes, Raiſons green or dryed, Liquoriſh chewed, quencheth Thirſt: Alſo Sugar candy, with Syrup of Violets held in the Mouth.

Manna, Sugar of Roſes, and Conſerves, with Spirit of Vitriol, Conſerve of Violets, candied Lettice, Coleworts, Guords, Citrons.

Or: Take *Conſerve of Roſes two ounces, of Sorrel one ounce, of Violets, Bugloſs, Water-lillies, of each half an ounce; of Currans*, as much as will make a ſharp Electuary.

Take *the Mucilage of Fleabane, and Quince ſeed, Gum Traganth extracted, with Roſe water, with Sugar, or Syrup convenient*: Make a Linctus.

Take *of the Mucilages mentioned one ounce, Syrup of Grapes half an ounce, with Sugar*: Make a Linctus.

Or put ſeeds of Fleabane, and Quinces, in a clout, and add Sugar, cool it in water, and lay it upon the Tongue.

Take *the four cold ſeeds, of each one dram; Purſlane ſeed, Starch, juyce of Liquoriſh, of each half a dram; with Gum Traganth*: make Troches to hold in the mouth.

Or Troches of Salt-peter, that is, Salprunella, with Sanders, and Suger, and Gum Traganth.

It is good to cool the mouth with water, and Vineger, Candied Coleworts, or with Roſe water, or Sorrel water, &c. or to hold Cryſtal, or a Stone, or Ice in the mouth and chang it often.

Some anoynt the Tongue with Mucilage of ſeeds, and Oyl of Roſes.

Cold air Cures thirſt, by cooling the Lungs, if it come from them: and by correcting the heat of the whol body, in regard the Tunicle of the Mouth, and of the ſtomach, are all one.

Baths for the Feet and Hands of cold water, and change of Linnen doth the ſame.

Alſo Epithems applied to the Liver and Heart.

And anoynting of the Throat and Neck with Oyl of Violets, Water-lillies, Willows, Poppies,

Some anoynt the Head in Feavers, with the ſame, becauſe the Nerves of the Head conſent with the ſtomach: but I ſuppoſe it doth good by provoking ſleep.

Hippocrates ſaith that ſleep ſlaketh thirſt, not becauſe it moiſtneth, as ſome ſay, but becauſe heat is carried outward by ſleep, as appeareth by ſweating, which is then moſt eaſie to be cauſe.

Reſt is good, becauſe it keeps the body cool.

And alſo little talk, for much increaſeth thirſt.

CHAP. XIV.

Of Defect of Bleeding.

The Kinds,

THe wants of bleeding, which is divers waies at ſet times; differ firſt, in reſpect of the place; as they are not, or not ſufficient, either from the womb, Fundament, or Noſtrils, or the like.

Stoppage of Terms. A ſuppreſſion of the Terms, is when the monthly Evacuation of women, by the womb for forty years, in which they are fit to bear Children; is wanting, and they are neither with Child, nor give ſuck. Some women, but it is rare, never have them and without inconvenience, theſe are *Virago's*, becauſe they are like men. Others have had them, but they ſtopped and never returned. Some have wanted them a whol year, or ſome months; In whom Lazineſs preſageth Diſeaſes: Then follows heart pain, want of Appetite, and loathing, with inclination to Vomite, Palpitation of heart and Arteries, Head-ach, troubleſome dreams, palneſs of face, and crudity of urin, diſcovereth it. And as theſe are preternatural in Plethory and Cacochymy, ſo are they Natural in Women with Child, whoſe Terms are ſtopped, they vomit in the firſt month. Alſo ſuppreſſion of Terms, is when they flow too ſlowly for the conſtitution, in leſs quantity, or ſhorter time then is meet. This cauſeth inconveniences.

Want of cleanſing after childbearing. There is another flux of the womb after Child-bearing, that is neceſſary, and continueth ſome dayes, more abundant then the monthly, the blood is called *Lochia*. If theſe flow not, they cauſe great Diſeaſes, Colick, and Convulſion.

Stoppage of Hæmorroids. There is a flux at the Fundament in both ſexes called *Hæmorrhoids*, in ſome Natures, either once in a year, or at a certain

certain time, this is said to be stopped, when it hath been, and is called suppression of Hemorrhoids. Physitians explain this defect chiefly, when there are other accidents from the retention of them; as Cacochymy, Cachexy, Quartan Feaver, Melancholly, and the like. The Patient disdaining the Flux, Complains not of the want of it, but when he is Pained by the swollen Veins, which cannot open, which are called the blind Hemorrhoids.

The want of bleeding at Nose.

Some have a natural Evacuation at the Nose, at a set time, which are young and Plethorick, and bleed at no other part, as women that want their terms that are with child, or Virgins, before they have them; And hither may be refer'd, the critical evacuations in Diseases. If any of these are stopped, the Physitian must endeavor to procure them.

Defect of bleeding by other parts.

If blood flow another way, though sometimes it doth good, yet in regard it is not so according to nature, it belongs to the defect of Natural bleeding if it stop.

The Causes.

The defect of these bleedings, is either from the want, or foulness of blood; or from the stoppage, or straitness of the Veins.

Women fit to conceive, must have more blood then is fit to nourish the body, to nourish the Child, if they do conceive, or to be purged forth, at the end of the month, if they conceive not. If this plenty of blood be wanting, or not sufficient, there is little, or no Flux of the Terms. And though this want of blood may come from divers causes, yet all do not cause this suppression.

A manly Constitution, is the cause of suppression of Terms.

There are Women, but few, in which as nature before they are ripe to conceive; breeds no more blood then will nourish the body, so she keeps the same course, when they are fit to conceive, these are barren; and without other inconveniences. These are called *Virago's* from their manlike constitution.

Spare Diet causeth the same.

From want of juyce, of which blood should be made, the Terms flow less, rather then cease: because nature keeps the the same order, when blood doth not abound. Yet there may be a defect of Terms from long fasting, or use of bad meats, so that the body may grow very lean.

Blood sent another way causeth want of Terms and Hemorrhoids.

In sharp Diseases, the blood being spent by violent heat, if it continue long the same may be; but being short it rather causeth a Flux then stops, and often in a Crisis cureth the Disease. And great Fluxes by provoking the expulsive faculty provoke the Terms; except they be bloody, and then they hinder, as the Terms hinder them and bleeding at the Nose. So these Fluxes are stopped by deriving of the blood to another part. And the cheif cause of suppression of Humorrhoids is, when nature retaines, or sends it otherwaies.

Thickness of blood also suppression of Terms and Hemorrhoids, when it will not flow, being too thick from the juyce of meats eaten, or want of serum to carry it. And this is the cause that in Cachectickes, and Hydropicks, the Terms are stopt,

Thickness of blood, causeth suppression of Terms.

the serum, or whey sweats through the Veins, and when a Vein is opened the blood is thick, and if it stand, like red, or white Coral.

Crudities and impurity of blood, causeth suppression of Terms.

Crude and impure blood, if it be thick (as it will be when it is cold, as we have observed with a thick skin at the top;) or foul: will not flow by the Terms; for the purest blood is sent to nourish the Child, and to breed milk. If therefore it be foul, or there be obstructions, then the Terms are wanting. Therefore Cachectickes, Leucophlegmaticks, or Virgins in the Green-sickness, while their blood is bad, have not the Terms, but when it is putrified, have. Hence it appears, that this natural flux of the Terms, is not for to discharge foul blood according to the vulgar error, which will rather hinder it, if it abound; And it is not from the quality of blood that is evil, but from the quantity abounding. And it is preternatural when it is immoderate, or without order; And we shall shew that women after they are past the Terms, may so bleed. And though the impurity of the blood, cause the Flux of the Hemorrhoids, it is no argument why the Terms should flow from impurity naturally, for they differ greatly; for though foul blood be usually purged by the Hemorrhoids, yet it is easie in those that are accustomed to them.

Obstruction of the bowels, and elsewere causeth the same.

Obstruction of the Veins, causeth defect of natural bleeding, chiefly in the great Vessels, or those of the part by which blood should flow. Because the natural distribution to parts that should void it, is hindered; As we may observe that cupping or bleeding, hinders bleeding by revulsion, and bleeding at the foot, provokes Terms. Hence is it that Cachectickes have not the Terms so much, because they have impure blood, but because of obstructions. And when the Meseraicks are obstructed the Hemorrhoids flow not, which causeth great Diseases by putrefaction, as Feavers, Melancholly, Epilepsies; which are not cured, except the Hemorrhoids return.

Obstruction of the parts that should bleed.

If the obstruction be in the part by which they bleed, the flux is stopped, as the Veins of the Neck of the Womb stopped, hinder the Terms, the Veins of the Womb stopped hinder the after flux; if of the Nose the like. Either by thick blood, or other humors.

Fat, a Callus, or scarre, causeth stoppage of Terms.

Straitness of the Veins and of their orifices, stoppeth blood: as when fat grows too much in the Womb, or a scar remains after an Ulcer, or other hard Tumors; by which last the Veins in the Fundament may also be stopped. Especially if they be swollen hard; as shall be shewed in the blind painful Hemorrhoids. The Womb also may be so naturally formed, that the Veins may be wanting, or closed in such as never had Terms, called *Virago's*.

A Tumor also causeth suppression of Hemorrhoids.

Evil Conformation.

Or,

Weakness, causeth want of Terms.

Although it be the common opinion that a cold distemper stops the Terms, and therefore they take heed of Cold, and cold Meats, and impute it to eating of cold things. Yet these parts cannot be so cooled that the Orifices of the Veins should be stopped; except cold keep the blood from flowing freely. Or comes after the native heat is weakned, which weakneth

eth the expulsive faculty and makes the terms flow less and more seldom.

The Cure.

The Cure of Terms suppressed.

In the Defect of terms keep this method (of the rest we shal speak hereafter) If it be when the woman is not fit for Children it is natural and not medled with. You must not attempt til fourteen, and when they are evil colored; And if they stop after forty four they must not be recalled; nor when the woman hath conceived, or giveth suck although there be more blood than is needful, and some have their terms sometimes then. Nor at a time when they use not to flow, except to prepare the Body, but in that week wherin they used to flow, must you give things to provoke them, especially if they be strong: Or when there are signs of them, as pain of the back and the like, or have drops appear.

It is impossible to bring down the Courses in them which are from the Birth of a man-like constitution, or have the Veins closed, when they never had them, and are barren.

If they cease for want of blood, or fault thereof it is in vain to attempt their recovery in lean people, but it is better to repair the blood, by good diet: And then they wil come of themselves. If they have been turned another way, and flow not at the Womb, they must be brought thither again.

If foulness of blood or obstruction of the bowels cause it, we must open them and clense the blood, and give things that provoke the Terms. And these are to be used in the stoppage of the Hæmorrhoids when the foul blood remains in the meseraick Veins.

A hard Scirrhus or Callus in the neck of the womb if it hinder the Courses must be taken away, And then if the Terms flow not, they must be provoked. If the Veins of the womb be so hidden with Fat, that they cannot bleed, it must be consumed by Fasting.

In other causes, as thickness of humors and obstruction of the Veins of the womb, or coldness, we must proceed as followeth, when we intend to move them.

Purges are good if they be stopped by reason of the foulness or impurity of the blood; which, though they provoke the expulsive faculty and cause dejection or going to stool, yet because they also stir up and move the veins of the womb, they so provoke the Terms also: Wherefore when Courses flow, to abate them and prevent them in Women with Child, we dare not give Purges. And in those that are stopt we often do more by purges that are mixed with things that provoke the Terms, than with such things as only provoke them. And these we proportion to the humor abounding whether it be Flegm, Choler, or Melancholy.

We first loosen the belly with Catholicon, Hiera, or the like.

Then we prepare the humor thus. Take *Syrup of Mugwort and the five roots, of each one ounce and an half; Oxymel simple one ounce, water of Mugwort, Motherwort, each two ounces and an half; water of Pennyroyal and Nepp, each one ounce*; make a *Julep for three or four doses* sweetned with *Cinnamon*.

Or this Decoction. Take *the five opening roots steept in Wine each half an ounce; roots of Madder and Eringus, each six drams; Valerian roots half an ounce, Mugwort, Pennyroyal, Motherwort, Balm, Nepp, Germander, Chamæpitis or Groundpine, Time, each a handful; Tops of Hops and red Peaſe, each a pugil; Bayberries half an ounce, Anise and Fennel seeds each two drams; Parsley and Dodder seed, each one dram and an half; Flowers of Rosemary, Elder, and of both Bugloſſes, each a pugil; roots of Polypody one ounce*: make a *Decoction*, sweeten it with *Sugar* and *Cinamon*, and give it several daies.

Then purge with this Potion. Take *of Catholicon six drams, Agarick one dram, the species of Benedicta Laxativa half a dram, Saffron five grains*: make a *Bolus* with *Sugar*, or drink it with *Rosemary* or *Wormwood Wine*.

Or thus in cholerick bodies. Take *Tryphera Persica six drams, Rhubarb one dram, Spike one scruple, Electuary of the juyce of Roses one dram, Syrup of Roses solutive one ounce*; with *Bugloss and Fumitory water* make a *Potion*.

Or this Decoction. Take *Liquoriſh one ounce, Red Peaſe a pugil, Mugwort a handful, Annise and Fennel seed, each two drams; Cordial flowers a pugil, Polypody roots, Carthamus seed, Senna, of each half an ounce; Epithymum two drams*, make a *Decoction*: Infuse *Agarick two drams*, strain it and add *one ounce of Syrup of Roses solutive* for a *Potion*.

Or this Pouder. Take *Turbith four scruples, Agarick two scruples, Cinnamon, Ginger, of each half a dram; salt Gem one scruple, Saffron five grains, Sugar two drams*, make a *Pouder*, give it in *white Wine* which hath *Mugwort* infused or the like.

Or these Pills. Take *the species of Hiera and Benedicta Laxativa, each half a dram; Pil Fœtidæ one scruple*, or more, according to the strength, make Pils with *white Wine*.

It is good to purge with things that provoke Terms, at the time we expect them.

To weak people and Virgins we give gentler medicines, and because bitter things are best we give them in Pils, As. Take *Aloes one dram and an half, Agarick and Rhubarb, of each one dram; Myrrh and Gum Ammoniack dissolved in Vinegar, roots of Gentian and Asarabacca, each half a dram; Spike, Cinnamon, Mastich, each one scruple; Saffron five grains*, with *Syrup of Mugwort*, make a *Mass*. Give *half a dram or two scruples*, sometimes quickned with *Scammony*.

Or make this Infusion. Take *Succory roots, Parsley and Fennel roots, each half an ounce; Asarum roots two drams, Wormwood & Mugwort each one dram and an half; Senna one ounce, Rhubarb two drams, Spike a scruple, Agarick two drams, Ginger a dram*, shake them in *Wine* for three or four *Doses*.

We make a stronger like a Syrup thus. Take *of the opening roots one ounce and an half, of Liquoriſh and Peony roots green, each two ounces; roots of Asarum, Madder, Eryngus, white Dittany, each one ounce; roots of Birthwort and Valerian, each half an ounce; Sowbread two drams, Mugwort, Motherwort, Pennyroyal, Balm, Marjoram, each a handful; Savin, Savory, Horehound, Cardus, Thyme, of each half a handful; Rosemary, Elder, & the Cordial flowers, each a pugil; Wall-flowers one pugil and an half, red Peaſe a pugil, Juniper and Bay berries, each half an ounce; Annise and Fennel seed, each two drams; Dodder, Smallage, Parsley and Lovage seed, each one dram; Raisons one ounce and an half, Figs ten*, boyl them in *Water* and *Wine*: in the strained Liquor add, *infused Polypody and Carthamus seeds, each two ounces and an half; Senna six ounces, dried Briony roots one ounce*, boyl them again, strain them and add *Agarick and Turbith of each half an ounce*; and if you wil purge strongly *Hellebore one dram, Ginger one dram and an half*, boyl them again gently and strain them, add *six ounces of Sugar*, make a *Syrup*, give *one ounce* more or less as it worketh, with *Peaſe broath*, twice or thrice in the time the Courses should come, or in the full of the Moon which is thought a proper time.

An Infusion of dried bitter things in Wine is good As, Take *Asarum roots half an ounce, Sowbread roots two drams, Gentian roots one dram and half*, Wormwood, Cen-

tory

tary tops, Savin, Horehound, Carduus, each two drams; Marjoram, Pennyroyal, each one dram; Rosemary and Wall-flowers, each two drams; Annise and Smallage seeds, each one dram; Senna two ounces, Agarick, Briony roots each half an ounce; Turbith two drams, Ginger one dram, powder them and infuse them in *Wine two fingers breadth above them,* give it some daies.

Remedies given at the mouth to provoke the terms, Either do it by increase of blood in such as want it, as nourishing things: Or by heating and extenuating the blood, and opening the mouths of the veins, as Diureticks: Or by some property unknown to us. Of these we shal here speak.

They are diversly prepared and given at the time the courses used to flow, and that fasting, sometimes at the going into a Bath, or coming out. For so they do best, and one helps the other; and also before the opening of a vein in the Foot. The examples of which follow.

A Broath. Take *red Pease one pugil, Parsley roots two ounces, Borrage flowers one pugil, one Leek or an Onion:* boyl them, give the *Broath* with *Butter* and *Salt, Saffron* and *Cinnamon* every morning.

Strong People may eat Sallats of Watercresses, Radishes and Onions.

Give Pouders in Wine, Water, Decoctions, and other Liquors, or with Honey, Water or Wine, Syrups, Sugar, or made into Lozenges, or in Electuaries, or Pils, drinking some convenient Liquors afterwards.

They are thus made. The first, Take *Saffron half a scruple, Mace and Cinnamon, each one scruple;* and drink it in *Pouder* in the morning for some daies.

The second. Take *Nigella seeds half a dram, Myrrh one scruple, Cinnamon one dram, Saffron half a scruple,* make a *Pouder.*

The third. Take *the Troches of Myrrh* without *Assa Fœtida half a dram, Nigella seed and Borax, each one scruple;* make a *Pouder.*

The fourth. Take *Asarum roots, Leaves of Savin, each half a dram; Smallage and Parsley seed, each one dram; Cinnamon half a dram, Saffron a scruple, Myrrh and Amber, each half a dram;* make a *Pouder,* give a dram.

The fifth. Take *Asarum roots, white Dittany, Madder, Flower-de-luce roots, each half a dram; Sowbread roots, Leaves of Savin, Pennyroyal, Rue, Wall-flowers, Nigella seed, the cane of Cassia, and Cassia Lignea, Date stones, each one scruple; Cinnamon one dram, Schœnanth half an ounce, Saffron half a scruple,* make a *Pouder* for many *Doses.*

The sixth. Take *Date stones, Borax, Lavender seeds, each one scruple; Mace half a scruple, Saffron five grains,* make a *Pouder* for one *Dose.*

The seventh and the best is. Take *the Spleen of an Heifer gelded,* dry it in an Oven, take *a dram* thereof, ad *Cinnamon half a dram, Saffron three grains,* pouder them, give it with *Pease broath,* often. *Paracelsus* gives the essence. *Crollius* commends and teacheth the extract of the Liver and Spleen of an Ox.

Salts of Mugwort, Balm, and Celondine roots, are commended by Chymists.

Theriaca Diatessaron one dram, is an approved medicine for the terms.

One dram and an half of *Trypera Magna* without Opium, is the like.

The Electuary called *Hamagogon* given in one or two drams is also good.

The Electuary of *Rhasis* made of filings of Iron given in the quantitity of a Chesnut is good especially in Women of evil habit of body. And *Crocus martis* is commended by Chymists.

Another thus made. Take *roots of Birthwort Flower-de-luce, Madder, each a dram; Savin, Horehound, each half a dram; Schœnanth, Spike, Wood Aloes, each a scruple, Gum Lac. half a dram;* make an *Electuary* with *Honey.*

This is best. Take *Juyce of Mercury and Honey, each equal parts;* boyl them to a *Syrup* add the *Pouder* of *Nigella seed, a little Cinnamon, and half a scruple of Saffron,* make a thick *Electuary,* give one scruple or make it into *Pills.*

Conserve of Borrage given in Wine is a secret among Women.

The usualleft Pills are those of Castor.

The Troches of Myrrh are best, given in Pills by reason of the stink of the Assa Fœtida.

Thus: Take *Troches of Myrrh one dram, Castor half a scruple, with Juyce of Mugwort,* make small Pills.

Or thus: Take *Myrrh one dram, Aloes half a dram, Lupines, Nigella seed, Madder roots, Gentian, each half a dram; Saffron a scruple, Borax half a dram, with Syrup of Mugwort,* make Pills, give *half a dram.*

Or thus of Gums. Take *Myrrh one dram, Galbanum, Assa fœtida, each half a dram; Castor a scruple, Saffron half a scruple, Nigella seed and Asarum roots, each two scruples;* with *Juyce of Savin* and *Honey* make *Pils,* give *half a dram.*

Or thus. Take *Agarick, Hermodacts, each half a dram, dried wild Goats dung one scruple, Gum lac, Myrrh, each two scruples;* with *Syrup of Mugwort* make *Pills,* give *a scruple.*

In Women of evil habit of body to open obstructions and provoke the terms. Take *the Troches of Capars and of Rhubarb, each half a dram; Gum Ammoniack dissolved in Vinegar one scruple, Gentian and Asarum roots, and seeds of Smallage and Parsley, each two scruples; Troches of Myrrh half a dram,* with *Syrup of Mugwort and of the five roots,* make *Pills,* give *half a dram,* or *two scruples* every other or third day.

In liquid form we give to drink, Waters, Juyces, Infusions alone, or together, with Pouders or Electuaries.

The best waters are of Mugwort, Savine, Pennyroyal, Motherwort, Balm, Calamints, Caumints, Nip, Parsley, Fennel, Radish, Acorus, and Cinnamon, alone or together mixed we give them.

The Juyces of the same plants are good, but the pleasanteft are of Radish, Eryngus, Leeks. We give also the juyce of young red Osiers and white Wine.

Or thus. Take *the juyce of Radish and Eryngus, each two ounces; of Flower-de-luce one ounce,* with *Sugar* as much, give *one ounce and an half* with *Wine.*

Or thus. Take *the juyces mentioned,* add *juyce of Mugwort, Pennyroyal, Parsley, each one ounce; Sugar as much as of all,* make a *Syrup,* give *one ounce and an half* or more in *Wine* or by it self.

The Oyl of Savin four drops or five, in water of Savin, Pennyroyal, Mugwort, Balm, or the like, or a spoonful of Sack, doth quickly dissolve the courses.

Decoctions or infusions in water, or wine, or other Liquor are made of the Plants aforesaid, of which we draw waters; and the Decoction of Pease is most commended. Of Juniper berries also, and of Lupins, of Burnet, Chamomil flowers, and Barley, there is a good Decoction to be made.

Compounds of these are thus made: Take *Mugwort, Pennyroyal dried, Balm, of each three drams; Juniper, and Bay berries, of each half an ounce;* Boyl them in Wine.

Or thus. Take *roots of Smallage, Fennel, each one ounce and half; Red Pease, Barley, each a pugil;* boyl them add to a pint, *Honey four ounces, Wine two ounces,* boyl them again, and strain it, drink it often.

A bitter Wine most excellent. Take *Gentian, Valerian, and Asarum roots dried, each two drams; Madder roots half an ounce, Sea Onions prepared one dram, dried Wormwood, Carduus, Mugwort, Savin, Rue, each three drams;* infuse them in *Wine,* and boyl them in a double Vessel, give *three ounces.*

Hippo-

Hippocras also or Claret made of Spices and Honey is good.

A Syrup for the same is thus made. Take *of the opening roots each two ounces; Eryngus and Madder roots, each one ounce; Asarum half an ounce, Mugwort, Pennyroyal, wild Thyme, Savin, Balm, Calaminta, Nip, Rue, each one handful; flowers of Rosemary, Chamamil, Broom, St. Johns wort, Wallflowers, each one pugil; Smallage, Lovage, and Fennel seeds, each two drams; Red Pease one pugil, Juniper berries half a pugil,* boyl them in *Wine and Water in three pints of the strained Liquor,* dissolve *six ounces* of *Honey,* boyl it, and strain it, and so use it, or keep it boyld up to a *Syrup.*

Syrup of Mugwort, Calaminta of the opening roots, all the Oxymels are good.

Potions are made of those mixed: As, Take *Syrup of Mugwort one ounce and an half, Pennyroyal and Balm water, of each two ounces; Cinnamon water two drams:* Make a Julep, give it at once.

Or thus: Take *Parsley roots one ounce, red Pease a pugil, Pennyroyal one handful, Fennel and Parsley seeds, of each a dram:* boyl them in Wine, dissolve in the straining *Triphera magna without opium or Thereaca Diatessaron one dram, syrup of Mugwort one ounce, Saffron half a scruple:* Make a Potion for one Dose.

Of Topicks, make Baths or Fomentations for the womb in the time when the courses are expected, some daies, morning and evening for an hour; not to provoke sweat; but to warm, for that would hinder. Therefore they must not dry and astringe: but loosen. Hence it is that women find so little good by dry Baths. These are made of sweet and hot Plants boyled in greater quantity for a Bath, then a Fomentation, and with wine and water.

They are easily made even in the winter: As, Take *Savin green, Rue, Lavender flowers, of each two handful, or more: Juniper berries two pugils:* boyl them for a Bath to sit in, or a Fomentation in Summer; add *green Mercury two handfuls.*

Another for the Poor: Take *Onyons, Leeks,* and if the scent offend not, *Garlick:* boyl them alone, or with some of the abovesaid.

The third is this: Take *roots of Lillies, Valerian, Mugwort, Savin, Rue, Balm, Lovage, Pennyroyal, Calaminta, of each one or two handfuls; Chamomil and Elder flowers, of each one or two pugils; Fenugreek and Lin seed, of each one ounce; Carua seeds half an ounce, Bay, and Juniper berries, and red Pease, of each a pugil:* boyl them.

A Compound of many thus; if you have not all, take more of them you have: Take *roots of Lillies, Marshmallows, Flower-de-Luce, of each four ounces; roots of Madder, Birthwort, Valerian, of each three ounces; roots of Asarum one ounce and an half, roots of true Acorus and Elicampane, of each one ounce; Mugwort, Savin, Rue, Southernwood, Motherwort, Balm, Calaminta, Nip, Pennyroyal, Organ, Spikenard, Lovage, Savory, sprigs of red Osiers bruised, of each two handfuls; seeds of the lesser Centaury, Carduus, Marjoram, Bay leaves, of each one handful; Chamomil, Dill, Elder, Lavender and Wall flower, of each one pugil; Fenugreek and Line-seed, of each one ounce; Nigella and Watercresses seeds, of each half an ounce; juniper and Bay-berries, of each one pugil; seeds of Smallage and Lovage, of each two drams:* Boyl them for a Bath.

A Fomentation of the strongest, is thus made: Take *of Madder, Asarum, Birth-wort and Southred roots, of each one ounce; of wild Cucumbers and Mercury leaves, of each one handful; of Myrrh half an ounce:* boyl them in Wine and Water, add *the juyce of Savin and Mugwort, of each half an ounce; Ox-gal half an ounce:* Make a Fomentation.

If the Thighs to the Feet, are washed with the aforesaid Decoction, or if the Feet be bathed therein often, it is good.

And if you make Clysters of them, because the Neck of the Womb joyneth to the straight Gut, they do as well, especially if the body be bound; because Clysters of Mercury, Benedicta Laxativa and Hiera, by stirring up and forcing the Belly do work upon the Womb.

Or thus: A Clyster often repeated, is good: Take *Lilly roots three ounces, green Flower-de-Luce roots one ounce and an half, Valerian roots one ounce, Mugwort, Savin, Rue of each one handful; Centaury tops, Chamomil, Melilot and Lavender flowers, of each one pugil; Fenugreek, and Line seed, of each half an ounce; Carua and Nigella seed, of each two drams; Bay berries half a pugil, red Pease one pugil:* Make a Decoction, add *Benedicta Laxativa Hiera Logady, each three drams, juyce of Mercury and Flower-de-luce, of each one ounce; Honey of Squils one ounce and an half, Oyl of Wall-flowers two ounces, Ox-gal one dram:* Make a Clyster, give it without Salt, that she make keep it longer.

To anoynt the Privities and Loynes, after Baths, is good, and otherwise, with hot and loosning Oyls and Fats.

Oyl of Wall-flowers and Flower-de-Luce, of each an ounce is proper.

Or that called *Moschatum* or *Moschelinum*: Or this Oyntment: Take *Oyl of bitter Almonds and Lillies, of each one ounce; Oyl of Wall-flowers, Flower-de-luce and Broom-flowers, of each half an ounce; Goose grease and Marrow of Calves Legs, of each half an ounce; the Mucilage of Fenugreek six drams, Asarum, Birthwort, Soubread and Flower-de-Luce roots, of each one dram;* Wax enough to make an Oyntment.

Emplaisters are applied to the Share, and about the Privities; made of the former: As, Take *roots of Lillies and Orris, of each two ounces; Leeks one ounce, Mugwort, Savin, Pennyroyal, of each one handful; Figs ten:* boyl them in wine, stamp them, add *wild Goats dung two drams: Oyl of Lillies and Wall flowers, of each one ounce:* Make a Cataplasm.

Or: Take *Oyl of Wall flowers, Orris, Moschaline, of each one ounce; Storax and Galbanum, dissolved in Aqua vitæ, of each half an ounce; Sal Nitre one dram, Rosin of the Larich tree,* as much as is will make a Plaster.

A Fume taken into the womb by a Funnel, or through a hollow stool, provokes the courses, if made of Aromaticks, and other hot things, as *Hippocrates* saith; it is used after Baths, or at other times.

They are made of the Vapor of the Decoction of the things aforementioned.

Or thus: Take *white Dittany roots and Madder, of each one ounce; Mugwort, Hops, Pennyroyal, Savin, Baies, of each one handful; Bay and Juniper berries, of each one pugil; roots of Galangal and Ginger, of each two drams; Myrrh and Bdellium, of each half a dram:* boyl them in wine, and let her take in the Fume while it is hot.

Oyl of Spike or Civet put into the womb doth by its scent strongly draw down the courses.

The following sweet fume doth the same: Take *of Storax two drams, Benzoin, Frankincense, Gallia or Aliptæ Moschatæ, of each half a dram; Cloves, wood Aloes, Schenanth, Cassia Lignea, of each one scruple; Sugar two drams:* make them up in Troches for a Fume, with Gum traganth infused in Cinnamon water.

Or thus: Take *the wood of Berry bearing Savin, and Juniper,* and cast it upon the Coals, *or Juniper berries.*

This

This is ſtronger but ſtinketh: Take *Mummy two drams, Galbanum, Bdellium, Opopanax, of each one dram*; *Frankincenſe, Storax, of each one dram and an half*; *roots of Aſarum, Sebænanth, of each one dram*; *the hoofe of an Aſs, or a Horſe, one ſcruple*; Pouder them, *with the Roſin of the Larix tree*: Make Troches, uſe them in a cloſe ſtool.

The ſtrongeſt Fume to provoke the courſes quickly, is made of all kinds of dung dried, and poudered, and mixed with Saffron to be burned upon live coales, and ſent into the womb by a funnel.

Peſſaries put into the Womb, or Naſcalia applied thereto, when Virgins, are the laſt remedies, ſuch as may open the mouth of the womb with heat and ſharpneſs, and not exulcerate.

A Radiſh made like a Peſſary, and applied doth it.

Pot Mercury bruiſed, and put into a bag, is good, and better with flowers of Centaury; the true Scordium, Jack of the hedg, or ſawce alone called *Alliaria* doth the ſame.

Or thus: Take *juyce of Mercury, Onyons, Ox-gall, of each one ounce*; *Honey two ounces*: boyl them to a Suppoſitory conſiſtence.

To which you may add theſe Pouders: Take *roots of Aſarum, Sowbread, of each half a dram*; *Agarick one dram, Myrrh two drams*: boyl them *with Honey* to a Peſſary.

Or thus: Take *Aloes half an ounce, Myrrh two drams, Gentian roots one dram and an half, Nigella or Gith ſeeds one dram*: Mix them with *Ox-galls*, and make Peſſaries.

Another of Species: Take *of Species of Hiera Picra, and Benedicta Laxativa, and troches of Myrrh, of each one dram and an half*: Make a Peſſary with boyled *Honey*.

Another made of Antidotes: Take *of Triphera Perſica without Opium, and Theriaca, Diateſſeron, of each two drams*: Mix them with Pouder of Nigella, to Peſſaries.

This is moſt excellent: Take *of Myrrh half an ounce, Nigella ſeeds two drams, Agarick one dram, Sal niter half a dram, with juyce of Coleworts or Honey*: make a paſt for Peſſaries, and if you add *Troches of Alhandal half a ſcruple*; it will be ſtronger.

Another of perfumed things: Take *the Troches of Gallia, and Alipta moſchata, of each three drams*; *of Civet, Muſk and Amber-greeſe*, according to the purſe of the Patient, make them up into a Peſſary with Storax.

Or thus with Oyls: Take *Oyl Moſcheline two drams, Storax liquid one dram, Oyl of juniper berries ſix drops*: Mix them, and dip Wooll therein for a Peſſary.

If you make Injections of the Decoctions aforeſaid into the Womb. they are better then in Baths or Fomentations.

Or this: Take *Madder and Aſarum roots, of each half an ounce*; *Mugwort and Pennyroyal, of each one handful*; *Nigella or Gith ſeeds three drams, Lupines one ounce*: boyl them, *and in half a pint*, diſſolve *juyce of Savin two ounces*, inject ſome in.

Letting blood in the Foot, at the time is the uſual remedy; for when the blood above ſtrives to diſcend into the parts beneath, by reaſon of their Emptineſs through blood-letting, that blood which lay idle about the Veins of the Womb, is ſtirred up, and rather gets into the uſual paſſage then another, by which means the Terms are brought again. Wherefore we uſe this remedy of bleeding in the Foot, not only in full bodies where we open a Vein in the Arm alſo firſt; but alſo in lean, except other matters hinder: And we uſually open that under the inward Ancle called the *Saphena* in that Foot where it moſt appears, which we firſt put into hot water, and alſo after it is opened that the Veins may bleed better. But it will be as good in the Ham Vein, and bleed better. If you bleed in both Feet together, or in one in the morning, and in the other afternoon it will be better, at which time if you bind the Hip with a Ligature faſt, that the blood may not diſcend, it will ſooner be carried to the Womb.

Horſleeches if they ſuck well may ſupply the Lancet.

Cupping-glaſſes applied to the Hams, inſide of the Thighs, and Privities draw the blood thither, eſpecially with Scarification.

Ligatures in the Hips and Feet, do the ſame, and ſtrong frictions from the Leg downwards.

Copulation if it may be lawfully done, Cures Virgins of this Diſeaſe: and they which are ſick thereby and pale, are cured the night of their Marriage, by having their Courſes, which is the token of their Virginity, to them which are ſound, and have them then afore the time.

The Cure of the want of Courſes after Child-bearing.

The Purgation after Child-bearing, is a kind of bleeding, which produceth great inconvenience, if it be ſtopped, and therefore is to be provoked, this is done by the ſame Medicines, of which in conſideration of the weakneſs of the woman that lieth in, we chuſe the mildeſt, and cooleſt, eſpecially if there be a Feaver which is often.

And in that caſe we give this Pouder: Take *roots of Piony* (which provokes the Terms, and if there be a convulſion, is alſo good againſt that) *one dram, Mallow ſeeds half a dram, Mirrh, Cinnamon of each a ſcruple*; *Sugar two drams*: give it at twice in *white Wine, and Piony water*, or the like.

Or this Decoction: Take *Piony roots half an ounce, Maiden hair, Celandine, of each one handful*; *Mugwort half a handful, Violets a pugil*; *red Peaſe a pugil, Barley half a pugil*: make a Decoction, add *Sugar and Cinnamon one dram, and Schenanth half a dram*, for two Doſes.

We give ſtronger, if nothing hinder us; As, Take *Mugwort, Vervaine, Celandine, Juniper berries*; boyl them in *Wine*, give it to be drunk.

Or theſe Pills: Take *Birthwort roots one dram, Mirrh half a dram, Pepper one ſcruple, with juyce of Leeks*; make Pills, take *half a dram*.

The reſt are like thoſe former that provoke Courſes, as Inſeſſions of Marſh-mallows, Chamomil, Mugwort and the like: and Oyntments, Fumes, Peſſaries, Frictions, Ligatures, Cupping-glaſſes, Bleeding in the Foot ſomtimes, conſidering the ſtrength and accidents.

The Cure of the ſtopping of the Hæmorrhoids.

If the Hæmorrhoids have been uſual and ſtop; and we perceive manifeſt danger at hand thereby, we muſt ſtudy to move them again. As ſomtimes we do, when they never were before: if the cauſe of the Diſeaſe may be carried that way; as we ought to do when the cauſe of Feavers and Melancholly and the like lies in the Meſeraiks. Alſo when the blood labors for paſſage at Hæmorrhoids, being ſwoln we muſt help nature: Thus,

Somtimes we purge by ſtool, by reaſon of the impurity of the blood, which is retained in the Hæmorrhoids ſuppreſſed, becauſe they have power to ſtir up and provoke the Hæmorrhoids, as well as purge, ſpecially if things proper for that be added, as Aloes Coloquintida, and the like, as we ſhewed in the Terms, the examples of which may be refer'd to this treatiſe.

As the Electuarium Hæmagogon, and the like, which is good to provoke both Courſes and Hæmorrhoids.

Topicks are better for moving the Hæmorrhoids than the Terms, becauſe the Veins appear more than in the womb, ſomtimes they are outward and ſwell, though ſomtimes more inward and blind, but alwaies eaſily to be reached by Medicines.

This may be done with Oyntments, this is the mildeſt. Take *roots of Orris, Sowbread, each half an ounce*; *tops of Centory, Motherwort, each two drams*; powder them, add *Oyl of Nuts a fingers breadth above them, juyce of red Onions one ounce*, boyl them a little, and ſtrain them, and anoynt therewith.

Or thus. Take *Bacon, the rind and Membranes taken off, one ounce, Hogs-gall half an ounce, Pigeons dung two drams, Niter half a dram*, make an *Unguent*.

Another. Take *Hiera Picra, Benedicta Laxativa, each two drams*; *roots of Sowbread, Birthwort, Centaury the leſs, each one dram*; make an Oyntment with *Gall* and *Honey*.

Theſe are ſtronger. Take *juyce of Leeks and red Onions, each one ounce*; *Hogs or Ox gall ſix drams, roots of Sowbread, pulp of Coloquintida and Euphorbium, each half a ſcruple*; with *Honey* make a *Liniment*, if you add the *juyce of Eſula* or *Lathyris* it wil be ſtrong, but remove it if it burn.

It is better in form of Suppoſitory if the Hæmorrhoids are inward, and be not ſore, thus. Take *Honey, Juyce of Onions, Gall each one ounce and half*: boyl them, add *Hiera Picra one dram. Myrrh half a dram, Sowbread roots half a dram, Sal Nitre a little*, make a *Suppoſitory*, add a little *Hellebore* it wil be ſtronger.

The root of Orris, made like a Suppoſitory, and dip'd in Gall or in Oyl of Orris is good.

A head of Garlick or Onion doth the ſame if you take off the outward skin, and thruſt it in, and a Sowbread root green.

Baths or outward Fomentations, and Clyſters ſuch as provoke the Terms are good in this caſe.

We uſe Leeches to the Hæmorrhoids to draw the blood, that after they may keep their courſe: We anoynt the Veins with blood to make them faſten, and ſet them on with a reed. This is the ſureſt and moſt certain Remedy.

Friction with a rough cloth, or Figg leaves, or with Borrage, doth open or prepare them.

We may do it alſo with a Lancet if the Veins appear, but we muſt be wary of miſſing the Veins: ſome prick them with Briſtles til they bleed, and open the Veins in the Feet, but not ſo properly, for the Hæmorrhoids proceed from the branches of the Gate-vein, and not from the hollow vein as the menſtrual do, and becauſe none of them come forth to the skin there can be no proper Evacuation.

The Cure of defect of bleeding at the Noſe.

It is not amiſs to provoke bleeding at Noſe, where it hath been uſual, and is ſtopt (eſpecially when any Diſeaſes of the Head, Eyes, or Ears are approaching) to prevent them, and cure them except nature of her own accord open the Veins in the Noſe. And this is no ſmall help to a Cure.

It is a difficult matter by reaſon of their ſmallneſs, and diſtance to open them with a Lancet, but ſome do it with Briſtles.

It is beſt to fil the Noſtrils with a Peſſary made of ſharp and rough plants, and to ſmite them, as with Yarrow, Burrage, Madder, Gooſ-graſs, and the flowers of Reed-graſs, or the like.

An Oyntment of Mints and Honey, or Madder and Oyl doth the ſame.

Diaſcorides ſaith that the Decoction of the root of Crocodilium or ſmal Crocus, being drunk, cauſeth bleeding at the Noſe.

The Cure of want of bleeding in other parts.

In other parts, as under the Tongue, or in the Forehead, Arms, or Feet (as when they itch from the foulneſs of blood, requiring the evacuation which was formerly made in that place, and which nature of her ſelf ſometimes forceth out, as we often obſerved in Horſes) if it be requiſite to bleed for the prevention or Cure of a Diſeaſe, it is beſt done by a Lancet; and to make the veins appear, you may firſt foment them with Decoction of Sage, or the like. And it is good to heat the body with things given internally and applied outwardly, to make the blood thin that it may be the better evacuated.

CHAP. XV.

Of the Want of Sweating.

The Kinds,

WE call this a Diſeaſe when the Evacuation made by the pores of the skin with moiſture called Sweat, is ſtopped, when it is neceſſary and ought to be: Or when a Vapor comes forth inſtead thereof: Or when the Sweat ought to be general through the whol body, and yet only ſome few parts, as the Head or Feet do ſweat.

The ſuppreſſion of uſual Sweating.

This is ſomtimes in found people that are plethorick or full of humors, Cacochymical, or of evil habit, and moiſt-bodied: who uſe to be refreſhed by Sweating, which when they want is called ſuppreſſion of Sweat.

The want of ſuch Sweating as is neceſſary for health.

When men by exerciſe or Baths labor to provoke Sweat for preſervation of health and cannot, then is there a want of Sweating, which is requiſite for health. And this we have obſerved to be in ſome who by no means or bathing could produce the leaſt ſweat.

The want of ſweat which in time of ſickneſs is neceſſary.

It happeneth in many imperfected Criſes of ſharp Diſeaſes, and in ſome lingring diſeaſes, that no ſweat can be procured by Art or Nature, which ſhould expel the cauſe thereof: and this is a defect of Sweat requiſite in the time of Sickneſs.

The Cauſes.

The cauſe of want of Sweat is when the moiſture decaieth or is turn'd another way.

As is the Serum or watry humor ſo is the Sweat, and Urin, for it cauſeth both, and when there is little Urin there is little Sweat. And when the Serum is not carried to the habit of the body but otherwaies as by much Urin, Seege or the like, then there is a defect of Sweat. Wherefore in Diſeaſes when Nature endeavors evacuation by ſweat, it is hindered by other paſſages. Moreover it may happen by obſtructions that the paſſage of the Serum may be ſo hindered that there

may

may be great difficulty in Sweating and Pissing: wherefore men in Dropsies piss little, and sweat with difficulty, though it be necessary for them. Also the thickness and sliminess of the serum may hinder both Pissing and Swearing, as in phlegmatick persons; and in sharp Diseases there is no sweat til the humor is concocted and made thin; therefore attenuating medicines do provoke Sweat, as we shewed in the defect of Pissing.

The cause of want of Sweat is because the serum goes not to the habit of the body.

The usual cause of want of Sweating is the not drawing of the Serum to the habit of the body, which is done by external heat, which being absent, Nature cannot sweat without great Violence, especially if the pores are astringed or stopt by cold external; for only closing of the pores cannot hinder sweat except there be external cold,

The Cure.

The Cure of want of Sweat.

If any want serum or natural moisture it is in vain to provoke them to sweat: also when it is plentiful and turned another way, except it be against natures intention; for if nature incline to sweat we must not use other evacuations, but hinder them. Also in Obstructions and crudities if we intend to evacuate by sweat, they must first be opened and the matter prepared. But if there be abundance of excrementitious moisture in the Veins and habit of the body, we must use this evacuation for the preventing and curing of Diseases, and it must be attenuated and concocted from its thickness and crudity: and first we must remove external causes which may hinder sweat, and then give Sudorificks or medicines to cause sweat such as follow.

Sudorificks or medicines to cause Sweat.

Among Sudorificks, some are such as cause sweat by a great quantity of Liquor taken in when there is external heat to further it; hence it is that when we drink fasting and warm in bed in any quantity, sweat wil follow.

And this is caused by cold drink as well as by hot, for the entrals being suddenly cooled, the heat external sooner draws the serum to it.

And this is sooneſt done by things that are piercing, and sharp, and these are called Sudorificks.

Among which distilled waters by reason of their thinness are the best, as for example, of hot herbs, Cherfoyl and Carduus, of cold plants, Fumitory and Lemmons.

Many Decoctions are made for this purpose as of Guajacum, Sarsaparilla, China, and other Woods, Roots and Herbs, boyld in much water. Or Horstail, or the lesser Polygonum, or the like, boyled in Wine.

This followiug is commended. Take *Millium or Panicum hulled, one pugil*, boyl it in *Water*, to four ounces of the *Water* strained, add *two ounces of white Wine* for one Draught, this is called St. *Ambrose his Syrup.*

Or this. Take *Hyssop and Marjoram, boyl them in Chicken Broath, and ad thereto two drams of the Emulsion of Hemp-seed.*

This is excellent. Take *Nep and Citron seed each one dram and an half; Water of Carduus and Sorrel each one ounce and an half or two ounces*; make an *Emulsion*, add *Syrup of Carduus or of Sorrel six drams, of Roses two drams*, let it be given at bed-time, some give the root of *Asarabacca two darms in pouder in three ounces of Carduus water* which is a good *Sudorifick.*

Treacle and other sleeping medicines are given dissolved to provoke Sweat, for in a deep sleep Sweat doth easily come forth.

Also the juyce of Elder or Danewort given with distilled waters, or in a Decoction doth the same.

Or, Take *Saffron one scruple, Ginger half a dram*: give them in *Pouder* with *Almond Milk.*

Or, Take *one dram of Brimstone with the Yolk of an Egg.*

The Chymists give Salts, Oyls, and Spirits, as Spirit of Vitriol with convenient Liquors. Their Bezoardine Mineral, Diaphoretick *Sol* and *Luna*, Diaphoretick Antimony, the Sulphur of Antimony, Spirit of Tartar, and the Treacle water of *Crollius*, the secret of Carduus, and the like.

All things that outwardly heat the body, so that the blood may be carried thither, and the serum with it and open the pores do cause Sweat: And they may be, greater or less as the humor aboundeth and the Constition requireth, as follow.

As many Cloaths and Coverings, Skins, and Feathers, Hot Air caused by the Sun, or Fire, which outwardly inflames the body.

Hot Water either natural or Artificial.

Oyntments for the Back and great Veins, which gently heat with Oyl of Lillies, Pellitory, and the like.

Also Violent motion.

And the passions of the mind which inflame the spirits and humors, as Anger, Joy, or such as shake the spirits, produce Sweat, as Terror, Fear.

CHAP. XVI.

Of want of Milk.

The Kinds.

ALthough the natural excretion of Milk or giving Suck, which ought to be from the Birth to the moderate growth of the Child, is not so necessary, that the defect thereof should prejudice the Woman: for we see many Women which for preserving of their Breasts neat, give no suck and receive no hurt thereby: except it be through plethory, or foulness, or Inflammation of their Breasts for want of giving suck: yet because it is an inconveniency to the Mother or Nurse, and also to the Child which must be nourished with Milk, it is called, a Defect. And it is divers, either when the sucking is hindred or cannot be, or when there is want of Milk wholly, or in part; and this is called the want of Milk.

Sucking hindred.

Want of Milk.

The Causes.

This Defect comes from want of Blood in the Veins of the Breasts, which is the matter of which Milk is made, And this comes from divers Causes as we shewed in the want of Courses, chiefly in Women with Child, who through squemishness

Want o f blood, Foulness or thickness of blood, is the cause of want of Milk.

neſs eat little, or that which is not nouriſhing, from the Diſeaſe called Pica. Or when they have too many of their courſes after Child-bearing, or when they flow in time of giving ſuck, which they ought not to do; eſpecially violently and beyond their ſtrength. Or when they have immoderate bleeding other waies. Or when they have in time of giving ſuck an acute diſeaſe, which makes them lean. Alſo when the foulneſs of the Blood is ſuch that it is brought to the Breaſts, for Milk is made of the pureſt blood which was the Childs food in the womb. Alſo thickneſs of the blood as it is the cauſe of ſtopping the Courſes, hinders increaſe of the milk wholly, or in part, becauſe it cannot get into the Veins of the Breaſts.

Stoppage of the veins of the Breaſts nipples without paſſage or abſent, or hurt, cauſe the want of giving ſuck.

Milk alſo is wanting, when the Veins of the Breaſts are ſtopped by ſome hard Tumor or otherwiſe. Or when there is no paſſage in the Nipples. Or when Nipples are wanting which comes from ſcratching when young Women have itching Breaſts, being marriageable, this cauſeth Ulcers which either ſtop the paſſage or leave a Callus or hardneſs which doth it.

Alſo the cliſts and pains which Women have from their ſtrong-mouth'd Children when they ſuck may hinder giving ſuck while they ceaſe.

The Cure.

The Cure of want of Milk.

If it comes from want of blood ſhee muſt be high fed, if from evil humors purged, if from thickneſs of blood, it muſt be attenuated or made thin, if from hurt of Breaſts or Nipples, they muſt be cured as we ſhewed elſewhere.

Medicines to cauſe or increaſe Milk.

For this we muſt uſe things that by a propriety cauſe Milk, or make the blood ſo thin by heat that it wil paſs into the Breaſts.

Milk, Eggs, Udders of beaſts, and brains are good not only for their nouriſhment, but for the property in them to increaſe milk.

Alſo ſuch Fruits as have a milky juyce, as Almonds, Pine-Nuts, and the like, eaten or drunk in Emulſions.

The Germans uſe a Broath of Eggs, Wine, Butter, and Sugar.

Alſo Riſe-milk.

Broath of Coleworts, Mallows, Rocket, Dill, Fennel, Parſley, is good: and though Lettice is ſaid to increaſe milk, we cannot believe it, becauſe it extinguiſheth ſeed.

Onions boyled or roaſted are alſo good.

And the root of purple-flowr'd Goats-beard boyld in Broath,

As Barly and Peaſe broath.

The beſt Wine nouriſheth, and warmeth, and is good for Nurſes.

Theſe Decoctions alſo. Take *Barley one pugil, Fennel and Parſley each one handful*; boyl them, and add *Sugar*.

Or thus. Take *Eryngus roots, half an ounce, Mallows, Polygala, Fennel, Parſley, Dill, Rocket, Baſil, Mints, each one handful; Barley, Peaſe, each a pugil; Line-ſeed two drams*, boyl them, drink it with *Sugar* every morning.

Of juyces thus. Take *juyce of Sowthiſtle and of Goats-beard, each half an ounce*; give it with *white Wine* and *Sugar*.

The Decoction of Earth-worms in Fleſh broath with Fennel and Barley is good, but let not the Nurſe know what ſhe taketh.

Dry things are leſs profitable, yet ſome ſeeds are commended whoſe herbs are better.

As, Take *Anniſe ſeed two drams, Fennel ſeed one dram, Rocket and Nigella ſeed, each half a dram*; make a *Powder*, give *two drams* with any fit Decoction.

Or, Take *Powder of Earthworms three ounces, Sugar half an ounce, Anniſe ſeed one dram, Ginger and Cinnamon each half a dram*; make a *Powder*, give *a ſpoonful* with ſome Decoction.

Or, Take *Cryſtal in fine pouder, one dram, or Coral*.

That which comes from the *alpes* called *Lac lunæ*, given one dram is accounted good.

Divers things are applied to the Breaſts, for the drawing of Milk unto them.

As hot Fomentations which enlarge the Veins.

And bruiſed Mints.

Or make this Plaſter. Take *Parſley, Fennel and green Mints, each one handful*; boyl and ſtamp them, add *Barley meal one pugil, Storax two drams, Nigella ſeed one dram, Oyl of Lillies two ounces*, make a *Cataplaſm*.

Some uſe Sinapiſms and Dropaxes, made of Muſtard or ſtinking Gums, to attract Milk, but they are too violent and inflame.

Friction of the Breaſt is better.

And Cupping-Glaſſes to the Arm-holes upon the great Veins which bring the milk to the Breaſts, and look blew, are good.

Alſo to let them be often ſucked or milked.

Alſo if Nipples be wanting, there may be an Inſtrument made of hollow Glaſs, for the Child to ſuck.

CHAP. XVII.

Of the Defect, or Want of Copulation.

The Kinds,

THere is a Defect of the Venereal act, when the Male and Female cannot perform, or weakly joyn together.

Men are more deficient than Women, for the man doth more in that act than the Woman.

Impotent men.

And they are called Impotent which cannot ingender at all for want of erection; and ſuch as do it faintly with

Weak men.

ſmall extenſion are called weak men; and when they ſpend no ſeed in the act whether done ſtrongly or faintly, they

Imperfect Venery.

are called Imperfect men. Nor is it a Defect when it is done but ſeldome, becauſe that may be ſureſt. And the more moderate, the better.

In Women, this defect is rare through fault of the Member, which will alwaies receive while it is ſound, neither doth it wont to recruit, as mans doth; nor are they confin'd to a certain time of luſt, as Bitches: Yet ſomtimes there is a defect in the Womb apparent, or cloſe, ſo that they cannot, or at leaſt with difficulty, they endure a Man, and will not

Venery hindered and imperfect women.

retain

retain him long. And so Venery is hindered, as it is imperfect, when there is none or smal pleasure in the act, especially if they have not been tired, but alwaies dislike, as I have known three women who advised with me that for many years never perceived any more pleasure then by an external touch, and this is called Venery extinct.

Venery extinct in women.

The Causes.

We must search out the cause in both sexes of this defect, whether the members be unfit for the act, or seed cannot be spent, or whether the seminal Vessels, which contain the Seed and conveigh it, be disordered.

The cause of weakness, or impotency in man, is the evil shape hurt, or nunness of the Yard.

This act is defective, from the want of a Yard sometimes: as some are born Eunuchs: others have lost it by accident, or by force: sometimes by loss of a part, as a stone by gelding; sometimes by smalness of the Yard, as Hermophrodites, which resemble women, and have but a very smal Yard sometimes by largness or thickness, so that the Womb cannot receive it without torment: sometimes by crookedness or windy swelling like a pudding, as in Hydropical Persons; or by an excrescence, hurt or Ulcer especially in the Glans or Prepuce, by which means it cannot endure any force by unclean Copulation, or violent acting, or when the Prepuce, or Foreskin is so straight that it will not come from the Glans: for these causes, either the action is not performed, or difficultly and imperfectly. And it is caused also by a cold distemper which hinders the flowing of blood to the part, which is requisite, as I shall shew, for the distension, or stretching of it. And when it is stupified and insensible from hurt of the Nerves, as in a Palsey: And also by inchantments, when the exquisite sense of the Yard is so lost that it will not rise by the tickling, which we shall shew proceedeth from the seed. Hence it is that either there is no act or very faint.

The growing together straightness, or hurt of the neck of the Womb, is the cause of defect of Venery.

Venery is defective from a fault in the neck of the Womb, when the passage is not open: For Children born without an Orifice, cannot live for want of Pissing, as hath been known: except it be made by Art. And this is sometimes by birth, and sometimes by an Ulcer after it is heated: but seldom; Yet a woman which through difficulty in Child-bearing was hurt in that part, whom I know, was so modest that she would not reveal it, but committed it to natures Cure: so that proud flesh grew about the Womb, and stopped her Courses from coming forth, and the Orifice was so closed, as appeared after her death, though living she would not declare it, that there was a thick Escar upon it, and it could not be seen, or perceived: This Orifice in Virgins is often closed with a Skin called *Hymen*, which causeth the first Copulation painful, and if it be thick, hinders Copulation till it be removed: Also it may be made straighter naturally, or by an excrescence, a Tumor, or Callus, or hurt of the neck of the Womb, which may cause such pain that she cannot admit of a man.

The causes of hindered, or imperfect Venery in both sexes of quenched Venery in a Woman, is either no Seed, or that which is naught in the Vessels.

From the affliction of the Seminal Vessels which bring the blood which begets seed, made, contained and sent forth from them, Venery may be hindered, or weak in both Sexes, if there be either no seed, or at least such as will not provoke to the act. For the sharpness of the Seed, causeth the Itch (not wind, as hath been thought) and stirs up nature by the spirits, in the Arteries and fils the Spungy Body of the Yard and Glans therewith, so that it is enlarged, swollen, hard, red, and hot, and fit for the action; especially when it is in the proper Vessels hot and labors to get out. But when it is weak waterish and crude, or little in quantity or none, then there is no pricking, without which there can be no erection, as in Eunuchs, and so there can be no performance, or very little and weak. And if this be in a woman, and the provocation, or pricking be wanting, they grow not warm, nor desire Venery nor find any pleasure therein. These distempers of the Seminal Vessels hinder the voiding of seed, when it is not wanting, and cause imperfect Venery.

Weakness, coldness, ill fashion of the Seminal Vessels, is the cause of defect of Venery in both sexes and of that which is called coldness in man.

The affects, by which Seed is wanting, or cannot be spent, or grows weak, are either weakness of the Seminal Vessels, by reason of old age, or a Disease especially about those parts, or too much Venery which relaxeth and weakneth them. Or coldness of the parts, especially in men when the Yard is refrigerated and cannot be filled and stretched forth with blood, for which causes little or none, or dul seed being produced, they are not stird up to Copulation; or their seed flows from them without sense. This also may come from an evil composition of the Vessels at the first; the kind whereof is difficult to be known in people that are alive, except it be conjectured from this, that they having perfect Members for generation, and no cause aforegoing to hinder it, cannot use Copulation; but when they are dead we may, as I have found, perceive in their opening want of Seminal Vessels, or disorderly passages, sometimes on both sides of the Reins or the like.

Inchantment is the cause of impotency in men, from whence they are said to have the point tied.

It often hapneth to men that by incantation, or witchcraft their Reins or Yard, or both are so weakned, that they cannot perform. These they call bound or lockt because it is caused by tying or a Point, a Bulls pizle, or Wolfes pizle, or of some other Lecherous beast. How this is done being preternatural, doth not concern us to enquire.

Gelding is the cause of impotency in Eunuchs.

By the cutting of the Spermatical Vessels, which bring the matter of the Seed, as when both stones are taken off (for one cannot do it) in men, because seed cannot be made, they cannot spend, nor have they a desire. Yet sometimes from other causes blood may so flow to the Member, that it may enter into a woman, but to no purpose; Wherefore when they will have true Eunuchs, to whom they may commit their women, they take of the Yard at the root: This is too often done to men, for the Cure of the Rupture, but I never knew it done, either for any Disease, or to take away lust.

The Obstruction of the seminal vessels is the cause of want of Venery.

Also the stoppage of the vessels by a thick humor or Tumor, may cause a defect, especially in men when the passage of the Yard for both Seed and Urin is stopt by a Caruncle or Excrescence, a Callus, a Stone, or the like, that neither can come forth. Or when the member is weak, in the act of Copulation, and the passage is not direct, nor sufficiently enlarged, so that the seed being little, is not directly conveighed but stopped til after it come forth of it self. Or when there is a hole through the Yard, by reason of a Fistula therein, as I have seen, by which means the Seed passeth not the right way. And this is not an hinderance to the Act as I shal shew, but only of Conception.

Stoppage or streightness, or Perforation of the passage in the Yard, is the cause that hinders Copulation or makes it Imperfect.

The Act of Copulation is not wholly hindred from a want of sufficient Blood to produce Seed, for little is required; wherefore poor men that are in want of Food, and such as have long been sick, and are in Consumptions, may do the feat, but they who have more blood do it to better purpose. Now that Copulation should not be desired in some Diseases where there is disturbance of mind and grief, it is no wonder, when pleasure and delight, which stirs up this act, is taken away.

Neither can thickness of blood cause it, when it is brought and dispersed for the extension of the Yard, for the arterial blood which hath most spirits is chiefly sent thither; yet we suppose them to be most lustful, whose blood is hotest and thinnest.

The Cure.

We must consider first whether the fault be hid or manifest and accordingly foretel and Act.

The Cure of Impotency, Faintness, Copulation hindred, or imperfect, or extinct, whether in man or woman.

If men are born without a Yard, or with a mishapen one not fit for the work; or if it be cut off, or the head cut, or if the stones are both taken out, the Cure is impossible. And Women that have the womb so closed that it can be opened by no Art without danger of life they are incurable. Other defects in men and Women, as Tumors, Ulcers, Wounds or Bruises, stoppage of the passage of the Yard, shal be spoken of in other Treatises. But we shal here shew the Cure of the streightness of the passage in man, and the largeness of the Hymen or Membrane in Women; but if none of these appear, and the Yard wil not stand nor seed be spent, or if the Woman without or with little delight perform the act and these be in sound people, there is some original fault which we perceive by what they have been from their youth; And this is incurable. Or when it comes from Incantation which is not our part to untie. But when from Weakness, Coldness, or other Diseases, which hindreth Seed, or makes it unprofitable, though long continuance may make difficulty, yet in these cases chiefly we undertake the Cure.

We give things that cause seed, and this as we said by its plenty and sharpness stirs up a desire to the Act, and disposeth the members for it. These are such as cause much blood, which is the matter of which seed is made. To these we add hot things which may make the blood hotter, and by consequence the seed, which will more stimulate or provoke; and by its heat and thinness come sooner and in greater plenty to the Yard. And when the serum is hereby inflamed and carried to the bladder, it being neer to the seminal vessels, & promotes the cause, as we have seen by the use of Spanish flies the Bladder hath been so inflamed that it hath been ulcerated, and the Urin hath been much and bloody, and the heat so sent to the parts adjacent that they have violently provoked Lust; this sharpness of seed may be cured with Salts mixed with other things, as I shal shew. And we shal shew that it is our opinion that such medicines work by a manifest quality, rather than by stretching the Yard with Wind as some say (which cannot be) besides their secret hidden quality which was observed by the first teachers of such things, from the whiteness of the flesh, fruits, and roots, resembling seed: Or because taken from Lecherous Creatures; Or from their shape resembling Stones, as the Satyrions or plants called Dogs-stones; or like a rough wrinkled Cod, as Toad-stools or Mushrooms.

Many things are given for this, especially at Supper, or after at Bed-time, if we expect the effect that night, or (if you wil have them successively to work) in the morning.

Of meats they are best that nourish wel, and cause much blood, and they are chosen which are white and ful of marrow, as Brains, Stones, especially of the most lecherous Beasts, as of Cocks, Quails, Sparrows, Foxes. Also the flesh of the Castor, because his Stones cannot be eaten by reason of their stink: but they are thought to be Bladders and not Stones. The flesh of Craw-fish, Crabs, Lobsters, Oysters, and other hard Fishes that have Gristles, Cuttle-fish, Polypus, Milk, Eggs, Almonds, Nuts, Pine-nuts, Pistachaes, Chesnuts, Beans, Pease, Rise, Barley, Hartichoaks, Parsneps, Rapes, Scirroots and roots of Goats-beard, and such as cause Milk, cause Seed also, also Onions, Leeks, Mushrooms, also Rocket, Coleworts, Asparagus; all these diversly dressed and eaten do the same, especially if they be prepared and salted: for Pepper stimulateth and provoketh Venery, and we suppose that when such things are so eaten it comes rather from the Sawce than the Meat.

The usual meats to provoke Venery is the white Broath called in Dutch, *Beinwarm* made of Wine, Egs, Sugar and Butter, with which the Bride-groom restoreth himself in the morning. Or that called *Leberſulf* made of Piggs Livers which helps Conception with Wine, Spices, and Saffron, this according to *Dioscorides* increaseth Venery; and that which the Germans give at Weddings called *Pfeffer* strong of Pepper, and that congealed saffron'd *Galren* made of juyce of Flesh and Fishes wel spiced.

Divers Junkets are made of Sugar, Honey, and Spices, given after Supper or at night at the Greeks Collation time called *Epidorpisinus*.

As dried Confections of Kernels and Seeds with Sugar, among which Rocket seed, Pine and Pistacha Nuts are the chief.

Or March-pane, as this. Take *Almonds, and small Nuts, each four ounces*; *Pine and Pistacho Nuts, each one ounce*; beat them, *Cinnamon half an ounce, Pepper one dram, Ginger, Cloves, Nutmegs, Cardamoms the great, each half a dram*; *Rocket seed two drams*, and if you wil have it yellow, *Saffron*; *or red Saunders and Sugar as much as is fit*, mix them and bake them in an Oven like Bread.

The Bread of Life called in High Dutch *Lebſuchen* wel spiced and honeyed was invented with the rest to provoke Venery.

Rocket

Rocket, Water-cresses and other sharp Herbs eaten at supper with Botargo or Honey after the Spanish fashion provoke much.

Strong sweet Wine wel spiced with Cinnamon and Pepper, taken moderately heats and refresheth the body, and makes it fit for the work: but immoderately; stupifies and makes unfit and sluggish.

There are divers pouders to be given with Wine, Milk, or the like, or made up with Sugar in Tablets.

The first: Take *Pepper ten grains*, only bruised that it burn not the mouth, let him drink it in *Wine* or *Milk* at bed-time.

The second: Take *Pepper half a dram, Saffron half a scruple*, make a *Pouder*, take it with any convenient *Liquor*.

The third: Take *Pepper one dram, Nutmeg half a dram, Salt one dram*, take it in a rear Egg.

The fourth: Take *Pepper a dram, Ginger, Rocket seed and Leek seed, each half a dram; Sugar two drams*, take a *dram*.

The fifth: Take *Rocket seed two drams, Asben keys, Burdock, Line, and Annise seed, each a dram; Parsnep, Nepp, Radish, Onion, Leek, Mustard, Nettle, Water-cresses, and Asparagus seeds, each half a dram; Pepper a dram and half, Ginger, Galangal, Cloves, Mace, each half a dram; Saffron a scruple, Ivory shavings a dram, pizle of a Deare or Bull, the flesh of the Scincus each half a dram; Sugar as much as all the rest, Cinnamon two drams*, make a *Pouder*, give *two drams*.

The sixth better than the rest: Take *Rocket seed half an ounce, Parsnep Rape and Leek seed, each a dram; Watercresses seeds and Pellitory roots each half a dram; Pepper a dram, Ginger, Cinnamon, of each half a dram; Saffron a scruple, Spanish Flies without wings nine, Borax a dram, Musk some grains, Sugar an ounce*, make a fine *Pouder*, give *a spoonful* at first in *Warm Milk*, and more if it fail.

The seventh and strongest of all: Take *two Spanish Flies the wings being taken off, Cinnamon one scruple, Sugar Candy one dram*, give it in *Milk*. if it do not the feat, take *three* the next time.

The Chymists highly commend the blood of Satyrion which *Quercetan* teacheth how to prepare.

Among Electuaries the Diasatyrion of *Nicolas* one dram was invented for the same use; also Confectio Anacardina which inflameth highly.

Another may be made thus. Take *Satyrion and Eryngus roots candied each one ounce; Ginger candied, Conserve of Acorus each half an ounce; Pine and Pistacha Nuts each three drams; the Kernels of Indian Nuts one dram, Line seed and Asben keys each two drams; Rocket seed one dram and an half, the Electuary of the three Peppers one dram, the species of Diambra and Diamoschu each half a dram; Cinnamon one dram, of Stags or Buls pizle and Scincus of the Sea dried, each half a dram* (for Women add *the dried matrix of a Hare, and an ounce of Sugar*) add *Honey as much as is fit for an Electuary*, give *two drams* or more.

The nauseous Pils are thus made. Take *of Mouse-dung half a dram, Rocket seed a dram, Pepper half a dram, Spanish Flies the wings taken off five*; mix them with *Turpentine*, give *a dram*.

You may make a Syrup to be kept til you have occasion thus. Take *the green roots of Eryngus, Satyrion and Parsneps each two ounces; roots of Pellitory and Dracunculus each half an ounce; Rocket two handfuls, Watercresses, Hedg-mustard, each one handful; Rocket seed half an ounce, Line seed, Asb-keys, Asparagus seed, each two drams: Anise seed* (which is thought to cause Milk) *half an ounce, Dates five*, boyl them in *white Wine*, and add to the strained Liquor, *Sugar, Cinnamon and Pepper*, boyl them to a consistence or height, give *an ounce* alone or with *white Wine*.

We have observed that gentle Purges corrected with hot Spices, whether they work or not, do vehemently provoke Venery: so that before they work they cause erection, as some have confessed to me, who thought I had mistaken in my intention when I gave the Medicine.

Sweet scents provoke not only by refreshing, but by heating and piercing, as Amber-greece, Musk, Civet.

In men outward applications are best for the Yard, and beneath, by the heat whereof the blood may come to erect that part: and that blood may come into the seminal vessels to make seed, we anoynt the Stones, Loyns, and Privities, and sometimes the soles of the Feet, these are made of hot Attractives.

Of usual Oyls thus. Take *of Oyl of Pepper, Euphorbium and Castor, each equal parts*.

Or thus. Take *Juyce of Rocket, Watercresses, Aqua vitæ each an ounce; Pellitory roots two drams, Mustard seed one dram, Euphorbium half a dram, Line seed Oyl one ounce and half*, boyl and strain them.

Otherwise, Take *Oyl of Nutmegs by expression two drams, Oyl of Spike two drams, Oyl of Cloves half a scruple*, mix them for an Oyntment.

Without Oyls thus. Take *the Gall of a Bore or Hogg one dram, Civet half a scruple, Honey*, anoynt the Yard and parts adjacent, if you add three or four *Spanish Flies* it wil be better.

Oyl of Ants which have wings; made by boyling of them in Sallet Oyl is excellent.

Also the Fat of a Hedg-hog.

A good Oyntment. Take *roots of Pellitory, Pepper, Ginger, Mustard seed, each one dram; Euphorbium half a dram, Castor one scruple, dried Ants half a dram*, pouder them, add *Oyl of Spike* and a little *Wax* make an *Oyntment*.

They say that if the right Toe be anoynted with Oyl of Spanish Flies it will provoke Venery: which we cannot deny to be possible from the vertue we have declared in them for provoking bloody Urin of which we have experience.

These Oyntments in the Loyns and Privities of Women stir them up when dull: But privately before Copulation, let the man anoynt his Yard wit Civet or Gall of a Hen.

The use of hot natural Baths is counted the best Remedy to restore heat in cold and decayed persons.

Also other Baths and Fomentations for the Feet and other parts being actually and potentially hot do the same, As the Decoction of Flower-de-luce roots, Nep, Calamints, Nettles' Marjoram, Rocket, Hedg-mustard, Lavender flowers, and of Chamomil, and the like.

It is good to wrap the Feet in soft furrs (which by their gentle tickling stir up Women and effœminate Persons) to preserve the Heat, and prevent Cold.

Somtimes weakness is taken away by manual Operation, in a Man when the Fore-skin is so strait that it will not uncover the Head of the Yard, we stretch or divide it by cutting. In women, when the neck of the womb is too strait, or covered with the skin called *Hymen*, or with a Callus, we open it with a thin Groat or Instrument made on purpose, to cut both sides.

Other things belong to the Cure of Incantations, as shaking of the Pillows, pissing through the wedding-ring, or the Axle-tree of the Plough, or the changing of shifts, before they go to the sport, shiftings of the left Foot, and the like, these belong not to us.

Nor

Nor care we for Amulets, to which much is attributed. They ſay the aſhes of a black Lizard carried in the left hand cauſe Erection, and in the right hand hinder it.

Imagination and apprehenſion of former ſport, provoke Venery extreamly; by remembrance beholding or hearing of things paſſed: and much more touching.

Sweet affections, as Joy advance, Sorrow and grief hinder the Act: This joy is brought by recreating the ſenſes, as the Sight, the Hearing, and the reſt, eſpecially by Muſick.

CHAP. XVIII.

Of Luſt, or Lechery.

The Kinds,

A Venereal Itch. WE call that Lechery which is an immoderate inclination to Venery, and it is either continual; or an often itching and luſt, which being unſatisfyed, diſturbeth and provokes people to ſordid, naſty actions, except they have government. This is ſomtimes in Males and Females, but differeth, in that men are ſooner hot: Women are longer cooling.

Luſtful fury. There is another kind which is far worſe and preternatural, called an inſatiable frenſie in luſt, which when it is excerciſed, hath no allay, but grows higher, and is unſatisfied.

This is oftner in Women then Men, as weakneſs is oftner in men then women; As in foul and pocky women, or the like, which have the Priapiſmus or Frenſie of the womb, ſo called. The Hiſtory of impudent *Semiramis* and of other, ſheweth that ſome have been ſo, and unſatisfied with innumerable men, and this Diſeaſe occaſioneth many to try unlawful things, and to fal into great ſins to appeaſe luſt. And ſomtimes when the fury of the womb comes, they deſire Copulation with beaſts, (as ſhe of whom I ſpake in the treatiſe of Madneſs, which deſired the Engliſh Dogs to Lime her.)

Priapiſmus, or immoderate erection. This is more ſeldom in men, though ſome are ſo Laſcivious, that they can do it often in one night, not naturally, but by the pride of appearing ſtrong, and by provocations and forcing: theſe have ſomtimes a venemous Gonorrhæa, or running of the Reins. This is called *Priapiſmus, Tentigo, or Satyriaſis*, from *Satyrs* painted with ſtanding Yards. And there is another Diſeaſe called by that name, which we ſhall after mention.

The Cauſes.

All Cauſes of immoderate luſt come either from much ſeed, ſharpneſs, or motion which ſtir up Venery, or from blood, which ſtretcheth the Member in men, as we ſhewed in defect of Venery.

Plenty of ſeed and heat is the cauſe of a Venereal Itch. If Seed be plentiful, it cauſeth Sanguin men, by reaſon of fulneſs, or heat of the Veſſels, which continually attract blood, which deſires expulſion where it aboundeth, to be Laſcivious.

Sharpneſs of ſeed, is the cauſe of Frenſie of the Womb in Women ſo called. Eſpecially when the Seed is hotter then ordinary and ſharper, this we have ſhewed, may come of eating hot Spices, or Medicines. And of hot humors and ſharp, not in the Womb of ſalt Flegm and Choller, as is uſual, but from the ſeed which is venemous and ſharp, from the heat of which comes the unſatiable Itch, which is uſual in unclean Women, who infect men therewith. Men when they are thus infected, have a running of the Reins, which ſends it forth, but women have it not ſo uſually. Some ſay that the cauſe why Lepers are not Letherous, is becauſe they are ſeperated from women, and conſtrained to be abſtinent.

Shaking of the Seed, cauſeth a Venereal Itch. Seed raiſed from its Veſſels, and deſiring paſſage cauſeth Itch, and is ſcarſe hindered from flowing: for this is the condition thereof while it is ſound and in its own place, except it abound, that it doth not much prick: But when it is removed, it is very troubleſome to get forth; ſo it is, for by imagination, dreams, and handling, Seed may be ſpent by both Sexes.

The cauſe of Priapiſmus, or Erection preternatural, is the plenty of blood gathered in the Privities. When much Arterial blood fils the Yard and continueth, it cauſeth Priapiſmus, or conſtant ſtanding with a deſire, of which we now ſpeak: But it may hapen that there may be Erection, before the blood come to prick the part, and a deſire afterwards from thence. Alſo it may come from heat of the Reins and parts adjacent, by blood, cauſed from lying upon the back, upon feather beds, or boards, which poſture makes blood come ſooner to the part, and makes Erection and greater Appetite, as experience ſheweth. And heat of the bed makes men riſe at midnight, as the Proverb is. If it come from other cauſes, as Pain, Inflamation, Wind, or Water, it belongs to another treatiſe.

The Cure.

The Cure of the Venereal Itch and Frenſie, and of Priapiſmus. If Men or Women are provoked to Venery, to prevent unlawful acts, the heat is to be allay'd by hindering increaſe of Seed, and heat thereof, as alſo of blood; and preventing the commotion of Seed. Thus,

Purges are chiefly requiſite when foul and ſharp humors corrupt and ſharpen the Seed, and cauſe luſt.

To cool luſt, we give things that quench, or that dry, though hot, if they conſume it, by a propriety: nor do we ſpend time to Cure and expel wind which is not the cauſe, as we ſaid: we give them evening or morning often, for the effect will not quickly be ſeen.

Sallats at ſupper of Lettice, Purſlane, Mints with Vinegar are proper, without Spices.

And this Electuary: Take *Conſerve of Water-lillies, and Mints, of each an ounce; Lettice and Coleworts candied ſix drams, ſeeds of Agnus Caſtus, (ſo called from its vertue) one dram and an half, Rue half a dram, Coral one dram, Cryſtal half a dram, Camphire a ſcruple, with ſyrup of Purſlane*: Make an Electuary.

A convenient Pouder: Take *Snakeweed roots one dram, Mints, Rue, Water-lillies dried, of each half a dram; the ſeeds of Vitex one dram and an half, Hemp ſeeds, Grapes, Lettice, of each one dram and an half; Cryſtal one dram, Camphire a ſcruple*; make a Pouder, take a dram in broath,

or

or syrup of Purslane, or with a little Sugar, or made into Tablets with Rose and Lettice.

A convenient Syrup: Take *juyce of Lettice and Purslane, of each two ounces; juyce of Mints half an ounce, Violet and Rose-water, of each an ounce; Vineger of Roses half an ounce, Sugar three ounces*: Boyl them to a Syrup, give an ounce often.

The Decoction of Lettice, Purslane, Endive, Mints, is good in broath.

Cold water drunk in great quantity, allaies lust.

Some affirme that they can take away all desire and use of Venery, with Wine in which the Fish called *Mullus* is infused, others give forty Pismires in drink.

Outwardly, cool the Feet, Privities, Loynes, so to wash the Yard in cold water, makes it presently fall, this remedy my Father told me, a learned man used who the first year of his Mariage, lost his Wife and Child at once in Child-bed, that he night die a Widdower without desire of Women.

Things that Potentially cool, mixed with driers and applied by Fomentation to the Privities extinguish lust, as the Decoction of Lettice, Plantane, Purslane, Willows, Water-lillies, and the like.

Especially if they be applied to the Feet, with Vinegar.

The juyces of the same to foment the Stones, adding a little Vinegar and Camphire is better; and injected into the Womb, doth the same for Women.

Vinegar of Roses, doth the like.

It is good to anoynt the Reins with this: Take *Oyl of water Lillies, two ounces, juyce of Lettice one ounce and an half, Vinegar half an ounce*: boyl them to the consuming of the juyces; add *seeds of Vitex one dram, Camphire half a dram, white Wax a little*: Make an Oyntment.

Unguentum Album, with Camphire, or that cooler of *Galen* for the Reins, with Camphire, doth the same.

And also Plates of Lead to the Reins.

Sugar and Crystal of Lead, with Oyntments, and Correcters, given in a final quantity, are commended by the Chymists.

The smel of Camphire stupifieth lust, therefore they teach that it is to be worn to preserve chastity, which it doth by touching it, or tying to the Arms; And Vitex and Vervain, they say, doth the same.

Great fasting doth somewhat allay lust, especially abstinence from hot Meats, Spices and Wine, which rule they ought to observe, which pretend to chastity, by abstaining from certain Meats, as the Friers who pretend to mortifie by eating of Shel-fish and Botargo, and the like, in the holy time of Lent.

The sorrow of mind and grief, take away lust.

And Diseases with pain, whether hot or cold.

By letting blood, something is abated, but it cannot make the Body lean or weak, without some other inconvenience. It is reported that one cured his Wife of her unsatiable desire, by opening all the usual Veins. And *Hippocrates* teacheth by the example of the Scythians, that the opening of the Veins behind the Eares maketh Sterility and Impotency.

Gelding is the extream remedy, for extream Lechery, and taking off the Yard, is the surest way, for which cause they say *Origen* Gelt himself; And I know a Priest that having been often punished for sin, in that kind, did the same, and Masters usually do so to their Servants, to whom they commit their Wives: but they deserve this punishment best, that sin in Adultery, and Fornication, and therein persevere.

The surest remedy is Mariage which is granted by God to all that want the gift of Chastity.

CHAP. XIX.

Of Want of Conception.

The Kinds,

Barrenness. When a Woman is of Age to Conceive and hath her Courses naturally, and hath the use of a Man, and conceiveth not, it is called *Sterility* or Barrenness. And if she have conceived and brought forth, and after brings not forth (which is usual, in the space of three or four years) it is a defect of Generation, which is necessary for the propagation of mankind.

Of those which are thus barren: some are found of a good habit of Body, and are often fatter then those which have born Children, and look not quickly so old. But oftentimes there are defects of the Womb joyned with this defect, either they never had their Courses, and therefore called *Viragines*, and because they also engender not. Or their Courses which they had, either flow not, or little and disorderly, with difficulty and discolored. This often hapneth to such, as have the whites, a Disease usual with barren Women. And they have other inconveniences, which either cause barrenness, or come from thence.

Viragoes, or manlike Women.

As when some bring forth only Females, which may hinder the Progeny of the Name.

The Causes.

The Cause why a Woman conceiveth not, when there is no defect perceived in the Venerial act, is either because she receives not the Seed into the Womb, or retains it not being received: And this happneth from the Seed, or Genitals of the Man or Woman.

This comes from the occasion of mans Seed, when it is not sufficient in quantity, or fit for Generation; and though a Woman receives it, either there is no Procreation, or its in vain, as a Mole, whereof we shall speak; for if there be not so much as will fill the Cavity of the Womb, which therefore was made little, a Child cannot be conceived. And this is the cause, that if the Seed be not enough for Generation, but often by too much Venery or running of the Reins abated, that such Generate not, as they who use it seldom, and either for Procreation, or health sake, are very temperate. Hence it is that old men marrying young maids get Children, as my Father after fourscore, in regard they are less hot and eager then young men, and go to it but seldom. Also if the Seed be not concocted, but crude thin and waterish, or too cold, and with spirits, or the like, which takes away the vertue, it cannot beget Children. This comes from weakness of the Vessels, or mixture of evil humors, and from the causes mentioned in Impotency and Lechery: sometimes there is a secret fault in the Seed which doth not hinder Procreation, which passeth to the Children, and shews it self then, and conveighs the like to the Grand-

The Cause of Barrenness from the Man, is little Seed, or Crudity.

child when it is of the age the Father was when his disease first appeared: Hence it is, that the Gout, Leprosie, and the like, are propagated.

The seed of a Man and Woman is the cause why Males or Females are begotten.

It is probable that this defect is in the seed of the Man when he begets no Males but Females, because it is weaker than the Womans which beareth away the Bell for the sex: It is better to impute the secret causes to the seed, than to the temper or the change of the sex or to the seeds coming from this or that Stone; for a Man with one Stone, of what temper soever may beget Children of both sexes.

When Barrenness is from the Woman it comes from Crudity impurity or want of seed.

It is necessary for Generation that the Womans seed should be mixed with the mans, for the Generation of a Fæmale, as may be seen by the likeness of the Mother in both: now if the seed be defective, or be in less quantity than is fit, Barrenness is by the womans cause, and oftener than by the man, for a Woman without seed may suffer Copulation, but a man without is unfit for it; and this is the cause why Whores which spend their seed for gain so that they are sapless, cannot conceive though they receive. And if if it be impure, crude, or the like, not only Harlots, but other Women are impotent and diseased. But if the temper of the Womans seed be the same with the Mans they say there can be no generation from the equality, but diversity. But we affirming the seed to be hot, do not place the generative vertue in it, but in the seemly temper of them both.

It seldom happens that a man is in fault by reason of the Yard, so it can but act, for though it be not so long as others it hindreth not, but the seed may be sent into the Womb if there be no other obstacle, for the womb being then hot and greedy after seed, easily condescends and takes it in.

The opening of the Yard being wrong is cause of defect in Conception.

But if the hole in the head of the Yard which sends forth seed and Urin, be not in the middle, so that it may directly aim at the inward Orifice of the womb, but in the side or beneath, as I have known in some, who have been born so, or if there be a Fistula beneath so that it is not sent to the mouth of ths womb, it is nothing worth.

If Barreneſs come from the Womb, it is seldom caused by the neck thereof, but by accident, as it hinders Copulation as I said: But this may be often caused from the Orifice of the bottom of the womb or the substance thereof.

The largeness, looseness, closeness, of the orifice internal of the womb, is the cause of Barrenness.

The inward Orifice of the womb, or that clift which is close and narrow, and openeth at the time of Conception, drawing the seed unto it; if it be too large though then it easily receive the seed, yet because it reteineth not it long enough, it is the cause of barrenness. This comes from an evil birth, when the child hath been violently taken away by reason of the bigness or ill posture, when it is so stretched that it cannot return, as in other cases, to its former proportion. And this is the cause why many times Women after difficult Travail never conceive again; some Women also are unfit for Conception by reason of the looseness of the Orifice, by moist excrement, either in the Womb, or the neck thereof, by reason of the Whites. And when the Orificeis shut up so that it cannot be opened, there canbe no Conception, because the seed cannot be admitted; this may be naturally, or by a scar, or excrescence of flesh, after the parts have been ulcerated, or torn in hard Travail, by which means the outward Orifice though larger, hath been closed, as I shewed before. It is seldom stopt from other causes. What they say of Fat in the neck or bottom of the womb, we have shewed cannot cause barrenness, but the cause is the not opening of the womb in conception, for at other times it is naturally closed, and after Conception closeth, and openeth not, but when there is a superfœtation or taking too much.

The cause of barrenness is the hardness and driness of the womb.

If the substance of the womb be too hard, or want blood, it is a great cause of want of Conception: for a Woman is then fit to conceive, when the womb which is thick and nervous, and unfit for conception while it remaineth so, becomes fleshy and soft by heat and afluxion of blood, and as in salt Bitches we see their privities swollen, so doth the Orifice in a Woman, and the clift is larger to entertain the seed. But if it continue in its natural condition, or grow harder, there can be no Conception, because the Orifice wil not open and receive the seed. And this is from the constitution and temper thereof from the original, the substance thereof is too dry, otherwise it is only in age, and then but natural, because they then cease to breed; but if it be hard before old age, it makes sound Women barren and so they remain. This befalls them who by too much Lechery and the like, have dried the Womb, or them whose wombs are hard by a Tumor, or after an Inflammation. But if

When the substance of the womb is not moistened with blood it is barren.

blood doth not moisten the womb, which is required for the enlarging & softning thereof, and for the increase of the Infant, either not at all, or by suppression of the Courses, or come not to the bottom of the womb by reason of the hardness thereof, or streightness of the Veins, or Obstructions: it comes to pass that Viragoes or Women that never had Courses, or that have them so much that they cannot be dispersed into the Veins for want of heat are barren. And hence it is that they who have long abstained from the use of man, or not conceived for other causes, and made their womb without blood through want of exercise, causing it to flow rather to the Veins of the neck of the womb to be purged by Courses, by reason of discontinuance or want of practise when they grow old; though they use a man, they conceive not so easily, as they who keep a constant moderate exercise from their youth.

Weakness of the Womb is the cause of barrenness.

The weakness of the womb is the cause why it is not fit for Conception, for the functions thereof being hurt the chief whereof is the conceiving of seed, it cannot attract, or retain it. This is from the birth, or from coldness, or other Diseases, these are slow to Venery, and subject to other Diseases of the womb.

A moist distemper of the Womb is the cause of barrenness.

The Cold and moist distemper besides the cold and dry is a hinderance of conception, and this is usually lookt at in Cure, as being the most usual. This comes from moist excrements in the womb made from evil and crude nourishment, which moisten and loosen the orifice, or from too much Lechery in Whores, which causeth slipperiness in the part. This

cannot

cannot be from a defluxion into the Womb, beause there is no passage, besides the body purgeth the excrements by the usual veins monthly: But in both when it comes from defect in the blood, the women that conceive not, are of an evil habit and ill-colored.

The Cure.

The Cure of defect of Conception. If a Woman conceive not, which hath no defect of the Venereal act, or in her Husband, we must diligently search out the cause thus. If it come from want of seed which is most the mans fault, then let them seldom engender, and use things to encrease seed, as we shewed. If from the crudeness of seed or foulness we we must cause good blood, and strengthen the vessels that breed seed. If it come from a fault of the Yard of the man which hath a hole in the wrong place, the Fistula must be cut, or first opened otherwise; and after united together and healed up, that the seed may come the right way. If this be from the birth it is incurable. If Barrenness be caused from the Wombs defect, as when it is hatd, or the orifice closed with a Tumor, or hurt by Child-bearing, the Cure is desperate in women otherwise sound, which have either never conceived, or have been hurt at the time of Travail, as in those who never have their Courses. In others who want Conception from Weakness, Moistness, Coldness, or excrements abounding in the womb, which have their Courses disorderly, or are troubled with the Whites, or other such like, there may be Cure.

Remedies to procure Conception. First let her be purged, observing her constitution, and the humor abounding, and whether shee have her Courses duly or the whites.

Generally thus. Take *Catholicon one ounce, Syrup of Roses solutive two ounces,* with *Burrage and Mugwort water,* make a *Potion.*

Then open a Vein if shee be plethorick.

Then give this preparative. Take *Syrup of Mugwort and Maidenhair, each one ounce and an half; Burrage, Mugwort, and Nep water, each one ounce;* with a little *Cinnamon* make a *Julep,* give it three mornings.

Or this Decoction. Take *the opening roots steept in Wine, each half an ounce; Eryngus roots one ounce, roots of Elicampane, Valerian and Masterwort, each half an ounce; Mugwort, Motherwort, Nep, Pennyroyal, Germander, Ladies-mantle, Marjoram, of each one handful; both Bugloss roots and Leaves, Succory, Endive, Fumitory each one handful; Wall-flowers, Broom and Rosemary, Burrage and red Pease, each a pugil; Anise and Fennel seed each a dram; Parsley seed, Siler montane and wild Parsnep seed each a dram;* bear, boyl, and clarifie, and sweeten them, with *Cinnamon* and *Sugar* make an *Apozem* for *three doses, or four, or five,* or make a *Wine* of the *Infusion* of them.

If we wil have it purge when the body is foul, we add *Liquorish two ounces, Asarum roots two drams, Poe-Mercury one handful, Raisons twenty pair, Senna and Polypody, each one ounce and an half; Carthamus seeds bruised six drams,* give them boyled as formerly with *Wine* and *Water.*

Then purge with this Potion. Take *Rhubarb four scruples, Cinamon one scruple,* Infuse them in *Wine* and *Endive-water,* strain and dissolve therein the *solutive Electuary of Citrons and Diaphenicon two drams, Syrup of Roses solutive two ounces,* make a *Potion.*

If Pills be taken. Take *Pills of Cochiæ, Agregative and fine quibus, each a scruple;* mix them with *white Wine* into *Pills.*

After purging give a dram of *Triphera magna* without *Opium* in the morning.

We also keep the body loose with ordinary Pills or Electuaries before bathing or use of outward medicines, as. Take *Catholicon two ounces, Diaphenicon one ounce, Cassia newly drawn two ounces, Pulp of Sebestens one ounce, Syrup of Roses solutive one ounce and an half,* mix them, take it with *Pease broath,* or *Wine,* or in a *Bolus.*

Usual Pills are either the former, Or. Take *the Aromatick pill called Alephangina, and that of Agarick, each one dram and an half; Cochie one dram, Troches of Alhandal half a scruple,* with *Syrup of Roses solutive* make *Pills,* give *a dram.*

Often sweating is good for moist Women, because it evacuateth from the whol body: as with the Decoction of Lignum vitæ using a spare diet, a Friend of mine used this diet and proved with child before it ended.

Also dry or moist Baths; Bleeding in the Foot to provoke the Terms as we shewed.

The things mentioned to provoke Lust, increase seed, are chiefly used for Conception: these are given to men, for they are most subject to impotency: but women may use them to heat and increase seed; and sometimes both together, lest one prove slow in performance. It is good to add for Women things proper for the womb, hot and dry, and such as provoke the terms if wanting, and consume humidity, Thus.

With these pouders, the first is. Take *Nutmeg one scruple, Musk two grains, Salt a little,* in a rear Egg every morning.

The second. Take *seed of Siler montane one dram, Rocket seed half a dram, Ivory shavings two drams, Cinnamon, Nutmeg, each a dram; Musk six grains, Sugar two drams,* give it in *Sack one dram* for a *Dose.*

The third, Take *species of Diamoschu and Diambra, each half a dram; shavings of Ivory one dram and an half, seeds of montane Siler two drams, Cinnamon one dram, Sugar two ounces,* or dissolve the *Sugar* in *Cinnamon* and *Mugwort water,* and make *Lozenges,* give *two drams.*

The fourth. Take *Boars stones two drams, Buls pizle one dram, of the Matrix and Runnet of a Hare, each half a dram,* dry them, and pouder them, adding *Cinnamon one dram and an half, Nutmegs, Cloves, each half a dram; Pepper, Ginger, each a scruple; Rocket and Parsnep seed, Siler montane and Asben keys, each half a dram; Watercerse and Peony seeds, each a scruple; shavings of Ivory and Goats-horn, each half a dram; Musk and Ambergreese, each six grains; Sugar ten ounces,* give *a dram* in *Pouder* or *Lozenges.*

It is better to make Confections of Nuts, than Pouders or Electuaries, for they wil decay so.

A dry Confection. Take *the preserved Kernels of Almonds, Hazel Nuts, Pine and Pistacha Nuts, each an ounce; Citron peels, Cinnamon, Cloves and Ginger candied each half an ounce; Rocket seed candied two drams,* mix them, give *a spoonful* at bed-time.

Make Marchpane thus. Take *sweet Almonds four ounces, Hazel Nuts two ounces, Pine-nuts two ounces, Pistachoes one ounce,* steep them in *Milk,* then bruise them, and add *species Diambræ and Diamoschu, each half a dram; Cinnamon two drams, Ivory shavings one dram,* beat them in *round Cakes.*

These Electuaries following are good. Take *Conserve of Eryngus and Dog stones, each one ounce and an half; Conserve of Rosemary flowers, Scabious, Citron rind, Ginger candied, each an ounce;* mix them with *two* or *three drams* of the first, second, or third Pouder aforementioned.

The rest are to be found in the Provokatives.

Or give one drame of *Triphera magna* without *Opium* in *Sack.*

The

The beſt Junkets are thus made: Take *Nutmeg a dram, Ginger, Pepper, of each half an ounce; dried Marjoram a ſcruple, Rocket, ſiler mountain, and Carua ſeed, of each half a dram*: Make a Pouder for the following Receites.

Take *the Brains of a Hog*: boyl them in Sack, then add *the Pouder aforementioned and Salt*, let her eat them often, at ſupper.

Or: Take *the ſtones and Combes of Cocks*, and uſe them as the former.

Or the *ſtones of a Ram*, ſlice them, and wrap them in the Pouder mentioned, and *Sage leaves* the Caule being wrapt about, let them be roaſted for ſupper.

Alſo other nouriſhing meats are good.

This diſh is pleaſant and excellent: Take *Mints, Scabious and Burnet, cut them ſmal*; add *two or three Eggs, Onyons, Nutmegs and Salt*, make a Tanſey thereof; or wrap them in Paſt and bake them, with *Colewort leaves*, in the Embers, let the Man and Woman eat thereof faſting, and go to the work four hours after, eight daies after her Courſes.

This Decoction is infalible: Take *Eryngus roots, Mugwort and Sanamunda*: boyl them in red wine, a glaſsful of it warm morning and evening with *a dram of Triphera Magna*, without *Opium* for nine daies together.

This is a ſecret, and of great force, give *Chymical Oyl of Marjoram and Muſk, of each one or two grains; with the Runnet of a Hare.*

If the Womb be looſe and moiſt, we muſt warm, dry and ſtrengthen it with Baths, Fumes, Oyntments, Peſſaries, and ſomtimes relax it, when hard.

Baths, Inſeſſions are chiefeſt, if uſed for five, ſix, or eight daies after the Courſes, before the Husband be admitted, before bed time, or ſupper, or in the morning, repeating them monthly three or four times, if ſhe conceive not, which we know by a ſtoppage of the Terms.

If we will make a Bath of hot drying and ſtrengthening things; Take of theſe more or leſs, *white Lilly roots, Valerian, Orris, Mother-wort, Mugwort, Pennyroyal, Nep, Organ, Calamints, Marjoram, Bayes, Savin, Juniper, Chamomil, Roſe, Elder, and Lavender flowers, Bay and Juniper berries, of each a pugil*; *ſeed of Siler Mountane half an ounce, Allum three drams or more, or Salt*: Boyl them in Rain-water, adding *Lixivium, Smiths forge water, and Wine.*

If you will have it more binding, add *Galls, Pomegranat flowers, of each a pugil; Bramble and Oak leaves, of each one handful*; *Allum half an ounce*: Boyl them as before, with more Forge water.

When we deſire to relax: Take *roots of Lillies, Mallows, and Marſh-mallows, with the leaves of Pellitory of the Wall, of each as much as is ſufficient*, add *Marjoram, Pennyroyal and others that ſtrengthen the Womb, with Lime and Fenugreek ſeed, of each a pugil; flowers of Chamomil and Melilot, of each two pugils*: Make a Bath.

If you will purge the womb from moiſture, add to a hot Bath Bryony roots, Mercury and Arſmart; make a Bath, or Fomentation.

She may be bathed for a month together, every day if her Body require it.

The laſt refuge is the uſe of natural hot Baths for a month, every day for many hours ſweating, as of Allum, Niter and Sulphur, with mollifie exceedingly in the hardneſs of the womb, but they will make found women Barren and help over moiſt bodies by drying. Alſo Salt water by its ſelf, or which other proper things is good. A Fume taken into the womb, is alſo good, from a Decoction in the ſweating chaire, or in the Bath.

A hot and ſtrengthening, is thus made of ſweet Plants, as of the Decoction of Motherwort, Pennyroyal, Calamints, Organ, Sage, Hyſop, Baſil, Marjoram, Roſemary, Chamomil, with Fumitory and Burnet, the roots of Maſterwort, Valerian and Acorus: Boyl them in wine and water.

If we will aſtringe more, and dry more: Take *roots of Snakweed, Agrimony, Acorn cups, Cypreſs nuts, with red Wine* and *Water*: Make a Decoction.

Let her take into her body a Fume of Pouders or Troches, upon live Coales, Thus made: Take *Benzoin, Storax, of each two drams; Labdanum one dram, wood Aloes one ſcruple, Muſk half a ſcruple, Sugar three drams*: Make Troches with Gum Traganth, uſe one at a time.

Or thus: Take *Troches of Gallia and Alypta Moſchata; put one upon the Coales.*

Or this not ſo pleaſant: Take *Maſtick, Frankincenſe Storax, Labdanum, of each a dram; Cloves, Cinnamon, Nutmegs, Cypreſs nuts, yellow Sanders, of each half a dram; Caſtor a ſcruple*: Make a Pouder ſprinkle a little upon the Coales.

Things that are put into the womb are called *Naſcals* and if they be far put in, Peſſaries; they are to purge the womb from moiſture, after Purging and the Terms, when the whites flow, before bathing, or at that time; for two or three nights continuance, or to make the Courſes flow kindly, a little before they appear.

Thus: Take *Mercury leaves green*, bruiſe them, and put them in a ſilk bag, anoynted with Butter. If it be too ſharp uſe *Honey* and *yolks of Eggs.*

Or thus: Take *Pulvis Benedictus half an ounce, Agarick three drams, Gith ſeed one dram, Goats-gall one dram and an half, Peaſe flower one ounce, with juyce of Mercury, or Beets*: Make a Peſſaty.

To heat and diſpoſe the womb for Conception, after bathing and Fumes, when ſhe is in bed, let her uſe the following Remedies all night the three laſt nights of bathing.

Thus: Take *Triphera magna without Opium one ounce, Maſtick half an ounce, Storax one dram, the runnet of a Kid or Hare half an ounce, Civet or Muſk half a ſcruple*: make Peſſaries in Bags.

Or thus: Take *Maſtick half an ounce, Frankincenſe three drams, Ivory ſhavings one dram and an half, Cypreſs nuts one dram, Balm, Nep, Cloves, Spickenard, of each half a dram; Civit or Muſk half a ſcruple, or one ſcruple of Caſtor with the Runnet of a Hare or Kid, and three drams of Storax*: Make Peſſaries.

In *Viragoes* whoſe womb is hard, and dry, it muſt be enlarged thus: Take *Gooſe and Hens greaſe, Mucilage of Fenugreek made with Wine, yolks of an Egg, each half an ounce; Roſin of the Larch tree, Runnet of a Kid, of each two drams; Orris roots three drams, Storax two drams, Wax, Muſk and Caſtor*: Make Peſſaries.

You muſt anoynt, after bathing, the Navil and Groins, above the Privities, *Oyl Moſchalinum*, is the beſt.

Or thus: Take *Oyl of Wall flowers, of Nard, Hens and Gooſe greaſe, of each half an ounce; Storax two drams, Cloves, Nutmegs, Mace, of each a dram; wood Aloes, Schenanth, of each half an ounce; Gallia moſchata one dram, Wax as much as will* make a Liniment.

This is beſt: Take *Oyl of Marjoram and Cloves by diſtillation, of each a ſcruple; Oyl of Nutmeg by expreſſion one dram, Civit and Muſk ſome grains; with Wax*, make a Liniment for the Navel and Womb, ſome daies after bathing, before ſhe come to her Husband.

She muſt have a Plaſter alſo to the Reins, and Perinæum, to cauſe the womb to attract Seed, and ſtrengthen,

then, to retain it at the ſame time, or when bathing Fumes, Oyntments, and Peſſaries are over, and ſhe begins again to go to her Husband; uſing it continually, or at leaſt every night, to the laſt week wherein ſhe expects her Courſes.

As this: Take *the Plaſter for the Womb one ounce, Gallia moſchata one dram, Storax one dram and an half, Cloves one dram, Maſtick two drams with Oyl Moſchelinæ*: Make a Plaſter.

If the Terms be ſtopt a month or two, and we fear ſhe is ſped with Child, you muſt reſt and expect a week or two, and let her be quiet, and except they return, let the Plaſter following be applied to the parts aforeſaid, to keep Conception and prevent Abortion, and ſhe muſt keep it on every night: Take *Emplaſter of Maſtick an ounce, Snakeweed roots three drams, Cypruſs nuts, Hypocyſtis, of each two drams; red Sanders, red Roſes, Cloves, of each a dram; with Oyl of Maſtick*: Make a Plaſter.

Decent Copulation is very neceſſary for Conception, and it muſt be when both Male and Female have a vehement deſire, and it is better when deſired from long want of enjoyments, then from provocatives. And this is the cauſe why men returning from Travail and Women from bathing, or abſtinence from Venery do ſooner procreate. Then it muſt be ordered that both ſeeds may meet at the time, and not be preſently parted. And when the Woman thinks ſhe hath her due let her abſtain til the Child be grown to the Womb and well confirmed. If they go to it a day or two after the Courſes, then there is hopes of Conception: ſom think the beſt time to hit, is when they have their Terms. But we think it may be done at any time, while the Womb is hot, as was ſhewed. There are ſome that teach divers filthy poſtures to cauſe Conception, and which is worſe, paint them forth.

If a man afore Copulation anoynt his Yard with Civet, in regard the Womb is delighted with the ſcent thereof, ſome think the Seed will be ſooner received.

They report that the ſmel of Civet, Amber greeſe, Musk in baths, or Cloves, or Pillows, eſpecially at night, maketh Women apt to Conception.

The Reaſon of getting Males, or Females.

That a Male may be conceived, rather then a Female: ſome think it may be by their uſing both a hotter and dryer Diet then ordinary, that Males are gotten, which are of the hotteſt Nature. Others ſay that if a man before Copulation, eate the Matrix of a Hare. and the woman take the Stones dryed and Poudered, in white wine, a Male will be begotten. Or if the man anoynt his Yard with Gooſe greaſe and Turpentine three daies before Copulation. Some think that of the Seed of the right ſtone, the Males are begotten, and the Females of the Seed of the left: And that by binding this, or that ſtone, at the time of Copulation, a Male or Female, may be begotten. Theſe follow *Ariſtotle*, who adviſeth this to be done to Cattle. But this is falſe, as may be ſeen in thoſe that are Gelt of one ſtone, and yet beget both Sexes, as we ſhewed. Alſo reaſon teacheth, that except the binding be ſo ſtraight, that the Seed Veſſels be intercepted, the paſſage of Seed cannot be hinder'd: And if that be done the man cannot be without great pain, and ſo will have little mind to the ſport, I'le warrant you.

Others thinks that Males are begot in the right ſide, and Females in the left ſide of the womb, and therefore adviſe women to turn on the right ſide after Copulation: Others Superſtitiouſly bind the right Foot with a white rowler of a Boyes, and the left Foot with a black.

THE SECOND TOME IN ONE BOOK; Which is the THIRD OF THE Whole Work.

Of Dolors, or Griefs, or Pains.

BY *Dolor we understand here every Molestation or trouble of the five Senses: of which sick people complain more then of the hurt of any Function, which is joyned therewith, we therefore shall not speak in this Book of Pain or Dolor, as it is in the sense of Feeling, but as it is in all the Senses. These Dolors are distinguished in respect of the senses wherein they are, for all the senses may be offended, but divers waies. For the four senses in the Face, and the fifth which is over all the Body do suffer divers waies.*

The Senses in the Face, as Seeing, Hearing, Smelling, Tasting, *have not such great pains, as the Sense of* Feeling, *and are sooner allayed. Of these we shall speak in the* first Chapter, Page 187.

The sense of Feeling, *which is through the whole Body, hath divers grievous and continuing pains; as Heat, Cold, Itching, Tickling, Pricking, Burning, Cutting. And we shall shew their differences, as they are through the whole Body, or the parts thereof.*

All the parts of the Body, that have the sense of Feeling, can scarse be pained at once. Yet many parts together, or some outward parts, as the Skin, *may have a general pain. And when the Body is weak or loose, albeit it seemeth to be pained all over, yet because the Patient complaineth rather of want of Motion and strength: you may seek for the Cure thereof in our Treatise of* Weakness and defect of strength and Motion: *when the whole Body hath a distemper, if it be great, all sensible parts may be offended. And this cannot come of a cold distemper, so that every part is at the same time affected, except it be deadly, but of a hot. So in Feavers all the parts of the Body are inflamed, and all sensible parts are offended, of this we shall speak in the Feavers,* the second Chapter, Page 187.

There are pains of all sorts of some parts of the Body. And these are either hidden or more manifest in divers parts.

The hidden pains are inwardly in the four distinct parts of the Body: The Head, Neck, Breast, and Belly, and the Cavities thereof, and are distinguished according to those parts.

The pains which are in the inward part of the Head within the Skull, shall be spoken of in the third Chapter, Page 235. Of the pains of the Head.

The pains that are in the inward Cavities of the Face shall be described, as followeth.

The pains in the Eyes shall be spoken of in the fourth Chapter, Page 241. Of Pain in the Eyes.

Those in the Cavities of the Ears, in the fifth Chapter, Page 251. Of the Pains of the Ears.

Those of the Nose, *in the* sixth Chapter, Page 253.

Those of the Mouth, *in the* seventh Chapter, Page 255.

Those of the Bones of the Mouth, in the eight Chapter, Page 258. Of the Tooth-ach.

The pains which are in the inward parts of the Neck, shall be spoken of in the ninth Chapter, Page 263. Of the Pain of the Jawes.

The pains which are in the Cavity of the Breast, shall be treated of in the tenth Chapter, Page 269. Of the Pain of the Breast.

The pains which are in the Cavity of the Belly or Paunch, shall be thus treated of.

The pains which are in the upper part about the Heart, shall be spoken of in the eleventh Chapter, Page 277. Of pains of the Heart.

Those on the Sides, shall be spoken of in the twelfth Chapter, Page 294. Of Hypochondriak pains.

The other Pains shall be spoken of in the thirteenth Chapter, Page 305. Of pains of the Belly.

Other pains in the parts adjoyning to the Belly, manifest themselves by things voided, as by Stools or Urin, of these we shall speak in the treatise of things cast forth: Other pains which are in certain holes and parts thereof, shall be hear declared.

The pains in the inward parts of the Privities, shall be mentioned in the fourteenth Chapter, Page 391.

Those in the Arse, shall be spoken in the fifteenth Chapter, Page 393.

The pains that are outward in the Body, are more manifest, and are thus distinguished.

Some are more deep and profound, these shall be spoken of in the Pains in the Habit of the Body, sixteenth Chapter, Page 396.

Those which are more outward and higher, and appear more, shall be mentioned in the seventeenth Chapter, Page 408. Of the Pain of Superficies of the Body.

CHAP. I.

CHAP. I.

Of the Griefs of the Sight, Hearing, Smelling and Tasting.

The Kinds,

ALthough that Irksome sense which the Touching feeleth be properly called Dolor, yet we may call them molestations or Troubles, which the other Senses endure, by that name, when the Function is not lost but offended. This comes diversly to the Sight, Hearing, Smelling and Tasting, from whence there are divers kinds, which are easie to be perceived, but not to be described or named. The Dolor of the Sight or Hearing we call The offence of them, and and the Dolor of the Smelling or Tasting we call insuavity or want of Rellish.

The Offence of the Sight or Hearing.
The Insuavity of the Smelling or Tasting.

The Causes.

These four mentioned dolors of the Senses comes from the violent quality of their objects which doth strike upon, or disturb them: from the object of the sight, by Brightness: of the Hearing, by Grating; of the Smelling by Stink; from the object of the Tast by its unsavorineſs.

Splendor or Brightneſs causeth the offence of Sight.

A Splendor or great Light if it be vehement, as of the Sun, or Flame, or come suddenly to the Eye, as of Lightening, molesteth it. Hence it is that men shut their Eyes at the sight of them. And the sense of Feeling perceiving the molestation in the Eyes and Nose causſneesing to shake them off, as we shewed in Sternutation. Also Light when it is discolored, and shines much and long, and strikes much upon the Sight is an enemy unto it.

Noyse hurts the Hearing.

A great Noyse by Crying, Ringing of Bels, Trumpeting or Drumming, or otherwise coming suddenly, especially neer the Ears, as of a Musket or Cannon, hurts the Hearing.

A Stink hurts the Smelling.

A strong Stink or Smel, as of Soot, or things burnt, or from Excrements molesteth the sense of Smelling: And somtimes by twiching of the Nostrils, and provoking their sense of Feeling, they cause neezing, and by offending the Neighbor Pallate and Tast, they cause Loathing and Vomiting.

An unpleasant and ungrateful savor, as bitterneſs, or extream saltneſs, or sourneſs, or the like, coming externally from things taken in, or from external humors or exhalations, sent to the sense of Tasting, causeth molestation, and also offendeth its sense of Feeling.

An evil Reliſh is the cause of Insuavity.

The Cure.

Take away the Cause and the Effect ceaseth. If it be external which useth to offend all the four Senses, it either quickly ceaseth or may be allayed. If internal which only hurteth the Tast, it is amended by purging of evil humors and repressing of stinking vapors. If offence remaineth by an impression upon the senses, it is to be cured by evacuations and things that alter and change the impression, as too much Light, by Darkneſs, offensive Colors, by such as please the Eye, Stinks, by Sweets, evil Reliſhes, by savory meats, as we shewed in the depravation of the senses.

CHAP. II.

Of Feavers.

The Kinds.

A Feaver called *Puretos* is a Disease in which the whol body is inflamed with a preternatural heat which continueth, it begins with cold and shivering, and brings forth divers molestations and symptomes. There are two chief kinds of Feavers that differ, in that they are either constant, or cease and return again. Those are called Continual, these Intermitting. Continual Feavers are those whose heatfr om the first to the last never wholly ceaseth, of these there are divers kind; the first sort we distinguish in respect of heat into sharp, and gentle or lingring, we call them sharp or acute, in which the Patient manifestly perceiveth heat and thereby molestation. These are two-fold, *Pure*, whose pure heat only heats the hand that toucheth it, and *Impure* when the heat doth not only heat but prick the hand. We call them gentle, when the Patient feels little or no heat, and not constantly though the Feaver be constant, of these there are two sorts, *Hectick* so called because the body hath gotten a habit of them, and simply gentle or lingring when there is no habit. If any of these have a Venom they are called *Malignant*, these are threefold from divers causes, *Putrid malignant*, or *Pestilential*, or *Venemous*, but to divide them according to their apparent accidents (for better understanding) some are called *Solitary* which have only the accidents of Feavers, others *accompanied* or which have the accidents of other Diseases with them.

Continual Feavers.

Continual solitary Feavers are such as are not accompanied with other accidents of other Diseases, but with such as belong to Feavers, and these accidents come from sharp lingering, or malignant heat, either single or together from hence some Feavers are called *simple*, others *compound*.

Simple continual Feavers.

Simple continual and solitary Feavers, are when one sort of Feaver only possesseth the body: These are shorter or longer, or more constant and lasting, if they have their Courses,

The shorter reach not to the seventh day, or to the weeks end: such are some acute and Malignant.

The pure Feaver, is a kind of continual Feaver.

Ephemera, is a kind of pure continual Feaver.

This is that sort of pure Feavers, of which we did speak, and is called continual, not Putrid Feavers, and Diaria, because it continueth but few daies. This comes of external causes and continueth sometimes but one day, and lasteth scarce twenty four houres, and then is called *Ephemera*: sometimes it lasteth two, three, or four daies: And then it is called a *Diary* Feaver of many daies, or *Synochus* pure, or simple. These end not suddenly with a *Crisis*, but by degrees by hidden transpiration, or moisture, or by manifest sweat: or they turn into impure *Synochus* after three or four daies, and that lasteth longer: or into an Hectick which is longest, and we shall shew by signs, into which they will turn.

The accidents or Symptoms of *Diary* Feavers are these, sometimes they begin with a little shivering, especially if they be any thing impure, sometimes without shivering, from an external heat.

A feaverish heat following a shivering, or without, is never encreased with fits, from the beginning to the end, but either is in an equal degree, as in *Ephemera*, *Synochus*, *Acmastick* or *Uniforme*, or *Seems*, to be increased in that, which is called *Epacmastick* that encreaseth, or *Paracmastick* that decreaseth. The heat varieth in them for it is milder, as the Feaver is shorter, as in an *Ephemera*, this is called gentle, because the Skin feeleth moist; or stronger, as it is longer, as in *Synochus* called sanguin, sometimes with sharpness, when it is cholerick and begins to grow putride.

The other accidents which are worse, or better, as the heat and constitution of the body is, are paine and beating of the Head, thirst more or less, and bitter tast; in cholerick persons unquietness, wearines, watching, or deep sleep, short breathing, quick pulse, strong and great, yet not uneven, a red face, swolen, great Veins, a soft Skin, and dry, in chollerick persons; Urin not much altered, when the Feavers are short, if long; red sweat not ill sented, or troublesom.

The Pestilent Feaver, is a sort of the continual Feavers

A Malignant short conrinual Feaver, is sometimes Pestilential, and is not unlike the formentioned acute Synochus, so that it is scarce to be distinguished from it, but by the generality of it in time of infection, and by the sudden taking away of strength. And if it have a botch, as is usual, it is not distinguished, hence it is that many infected with the Plague, suppose they have only a *Synochus* for a Pestilent Feaver, comes also from external causes, but they are occult: and suddenly and secretly smite the body, as in a moment, and endeth in a few daies, as a *Synochus* doth, except death or a *Crisis* appear.

As for the accidents of this Feaver. It begins commonly with a little horror or chilnes, and after followeth heat; which is somtime so gentle that the patient complains little thereof, And the Urin is little, or nothing different from a found. Yet the Pulse argues weakness. But sometimes there is vehement heat and sharp, as in a *Synochus*, and then the accidents are alike, as pain of the Head, doting, watching, and thirst, and sudden los of strength. And also sweats, which in Pestilential Feavers come at the first, and return in again, and yet do not put a period to the Disease.

The long continual solitary Feavers, are a week or two, or more a coming, such are some acute and Malignant.

A Putride Feaver, is a short continual.

An Acute long continual solitary Feaver, is one of those called impure, and is called also a continual putride Feaver, or a weeks Feaver, distinguished from the *Diary*, or daies Feaver. Which beginning of it self, or from a pure *Synochus* turning impure (which is thus known, when the pure endeth not in the fourth day at farthest, and the heat increaseth especially if there be a new chilnes, as is usual;) when after the beginning it stayeth a little in the increase, and so comes to the state, or heighth; the Patient is freed from it suddenly, by a *Crisis* and it declineth, except death prevent. And if the *Crisis* be imperfect, which comes again, it either kils, or cures: Somtimes, but seldom, this Feaver, especially that sort which is called burning if it fix, seems to degenerate into a new sort, which suddenly consumes the body: And this is called a burning and melting Feaver, which some say is a sort of Hectick; And somtimes it turns into a true Hectick, as a *Diary* Feaver doth.

There are more and more fierce accidents in these Feavers, then in *Diaries*, in so much that by reason of the violence of some accidents, the Feaver somtimes gets a new name, as if it were of another sort. And these molest the Patient, with horror, or amasment, heat, thirst, dryness of Tongue, Head-ach, which hurt the functions, disturbe the mind and weaken the strength, there are other accidents observable by the consumption of the Body, and the Excrements.

Thus: At the first coming there is horror and shivering, especially when they come of themselves and not by being changed from others; and then there is little or no shivering; this presently ceasing, ever after there is no trembling, except somtimes when a *Crisis* is at hand; neither will it return although there be fits, or *Paroxysmes*: And if it should return it comes not from this continual Feaver, but from an intermitting joyned with it, as I shall shew in Compound Feavers. But from this chilnes, or horror, the outward and inward parts also are cold, and somtimes only the inward, and somtimes only the outward, when the heat is great within.

The heat which follows this horror, or chilnes, according to the four times of these Feavers, hath divers changes: for at first it is vehement and sharp, and from that to the state or highth it increaseth. In which time somtimes are *Paroxysmes* or fits, and then they are called *Synochæ* continuated distinguished from putride *Synochus*. In which if the fits, or *Paroxysms* come often in a day, so that the feaver is twice or thrice cooled, then it is called inordinate and continual, especially if the day after it come but once or not at all. But if the *Paroxysme* come the next day and keep the same order after, which is rare, then it is called a continual Quotidian. The third day is usually the fit day in these feavers and then it is called a continual Tertian. The Quartan continual, is seldom seen, because the fits are seldom put off so long. Somtimes these feavers have no distinct *Paroxysms*, and then it is called *Synochus putrid*

An inordinate Synochus, Quotidian, or Quartan, is a kind of continual Putrid Feaver.

Synochus, a sort of putrid continual Feaver.

trid, which is called alſo Epacmaſtick, Paracmaſtick or *Homotonos*, or Equal, as it increaſeth or is diminiſhed. But if there be a great burning in a continual putrid Feaver which continueth, as one fit it is called *Cauſos* or a burning Feaver; in which the inwards burn and the outward parts are cold, it is called *Leipyria*. But when theſe come to their height if there come a good Criſes to abate the heat, they decline, and this is by Sweat, Piſſing, or the like Evacuation: But if the Criſes be for the worſt, Death follows. And if the Criſes be not abſolute, and the heat abate not, then by a new Criſes we judge of Life or Death.

Cauſos is a kind of putrid continual Feaver.
Leipyria is a kind of Cauſos.

Thirſt is very troubleſom in theſe Feavers, wherefore they deſire moiſt, cold, and ſharp drinks. There is total loſs of Appetite, and Loathing of Sweet, Fat, and nouriſhing things. And ſomtimes of four meats which in drink is pleaſing.

Somtimes in burning Feavers there is drineſs, blackneſs and Inflammation of the Tongue, by which means the diſeaſe is called by the Germans *Brenne* or *Braunchrot*, that is an Inflammation with blackneſs, eſpecially if there be malignity and the Feaver is common with this ſymptom. Alſo there is ſooner or later in the declining Inflammation chopping or exulceration of the Lips.

At the beginning there is great Head-ach, except they be ſenſleſs and perceive it not, for which cauſe in Germany it is called the Head-ach or *Haupture* with beating of the Temples and redneſs of Face. There is alſo Heart-ach. And a beating pain of the Bones, Loyns, Back, and Joynts.

Doting, after ſomtimes, comes upon them, more or leſs, and Madneſs; for which the Germans call them *Daubhaptwe* or mad Head-ach, eſpecially when it is malignant and vulgar. Sometimes a Convulſion follows theſe Feavers, but watching is the moſt conſtant.

Somtimes by reaſon of the Feavers conſtancy the ſtrength faileth, and in the Fit day there is ſwooning and then it is called a Swooning Feaver, and then the pulſe is great or ſmall according to the ſtrength.

A ſwooning Feaver is a kind of continual putrid.

At length the body pines by a long Feaver and a melting heat, eſpecially in the declining thereof, by much Sweat and Piſſing: Somtimes a ſudden conſuming of the body follows theſe Feavers, eſpecially a Cauſon or burning Feaver, as we ſhewed in a melting Feaver.

A melting burning Feaver is a kind of Cauſon.

As for the Excrements, ſome vomit very much, others have the Hickets, and ſometimes a flux thereupon. There is often much Urin made after a Criſis in the declining of the Diſeaſe. Sweat breaks forth ſomtimes and follows the Criſes: Otherwhiles bleeding at the Noſe, or by termes, is critical or judicial, ſometimes it is not. The Stools and Urin are very much changed, and divers in ſubſtance and colour: The Sweat is ſomtimes ill ſcented, ſometimes of none. All which changes and what they preſage we ſhal ſpeak of before the Cure.

A longer malignant and Continual Feaver, is often among Putrid malignant Feavers not much differring from the former, which is acute and putrid, only it is more vulgar like the Plague, among people of age, and eſpecially men. It comes ſecretly upon ſome, and ſuddenly deſtroies them. This is prolonged ſome weeks as the putrid, and is ended by a Criſes, and ſome evacuations as the others, but not ſo certainly.

A putrid malignant Feaver is a ſort of a Continual Feaver.

There are alſo the ſame accidents which are in a putrid Feaver; but greater and more dangerous. Yet the heat is more diſorderly and unequal.

The pain of the Head and doting is the moſt manifeſt, firſt and chiefeſt ſymptom.

Alſo Inflammation of the Jaws and Tongue.

Alſo there is a ſort of malignant feaver which came firſt out of *England* into all *Europe*, which declared it ſelf by a continual Swear, and deſtroied many. This was called *The Engliſh Swear*.

The Engliſh Sweat is a ſort of putrid malignant and Continual Feaver.

Alſo a dayly conſtant Feaver alone, which continueth not only ſome weeks but months is a ſort of Hectick. This comes from a change, when another feaver ends in a Hectick, as a Diary, if it turn not into a Putrid, ends in a Hectick after three or four daies, or a putrid Feaver of long continuance, or very burning, as alſo intermitting Feavers if long and vehement. Theſe end in Hectics, and kill a man at a diſtance.

The Hectick Feaver is a kind of Continual.

As for the accidents, the Patient feels no great heat, and thinks he is not feaverish, except an hour or two after meat; and that the Arteries are hotter, and more ſtretched out and hard, and ſwifter in motion, as in other Feavers.

Extenuation follows this Feaver, or it is increaſed after it was begun in the putrid that went before it, ſo that at length the whol body is pined away; for which cauſe (as the Conſumption is in the beginning, increaſe, or State) there are three ſorts of Hectick, not accounted ſo from the heat but Conſumption, they are called, Beginning, Increaſed, or confirmed Hecticks. In the laſt there is nothing left but skin and bone, and it is called *Maraſmodes*.

Alſo when Fat is voided by Urin, or like Bran, or Orobus, the Feaver is named from thence, but we ſhewed that they could not be but from diſtemper of the Reins and Bladder.

Maraſmodes *is a Hectick.*

By reaſon of long continuance, there muſt needs be great weakneſs; ſo that the Pulſe though quick, is ſmal and weak.

Compound Feavers are when divers ſorts meet in the body, at the ſame time, which happen divers waies either by mixture of continual with continual or intermitting Feavers.

Compound conſtant Feavers.

Divers ſorts of conſtant Feavers aforeſaid mixed together do afflict the body, as when a putrid is joyned with an Hectick of its own producing.

A Feaver compound of a putrid and a Hectick.

In this the vehement heat doth ſo hide the gentle, that the putrid is thought the chief, only the Hectick is diſcovered by the Conſumption eſpecially when the putrid declineth. And this Hectick ſooner diſpatcheth the Patient. And it is diſtinguiſhed from a melting Feaver that comes after a burning, becauſe in that the Feaver is moſt ardent and ſooner killeth.

Alſo all other continual Feavers may be joyned with an Hectick which went before, and wil ſooner deſtroy the Patient, as other diſeaſes coming after an Hectick. This mixture is known by the new heat of what ſort it is, and by its ſigns.

A putrid Feaver mixed with an intermitting is a semi-tertian.

Continual Feavers are often mixt with intermitting, and make also continual Feavers called perfevering, and these are discerned easily, by a new chilness coming at the time of the fit of the intermitting Feaver. All continual Feavers may be joyned with an intermitting, and seem to be one when joyned with continual acute, called Putrid. And because an intermitting tertian is usually joyned with a quotidian, it is called a semi-tertian, and it is greater when joyn'd with a continual quartan, also a continual and intermitting Quartane may be joyned together.

If the continual Feaver be first, it begins with astonishment and horror or trembling, if the intermitting be first, with chilness; and there are two fits in a day, one is from chilness of the intermitting, the other is an increase of the continual without horror: And the second day they make but one fit, and keep that order til they both go together or follow each other. Only an intermitting Quartan joyned with a continual, hath two fits the fourth day.

Every Feaver hath symptomes according to its kind, especially because cold falls in with the heat of a continual Feaver which hath inflamed the body, and then in the fit of the Tertian the Patient feels both heat and cold, this is called *Epiala*. Now the heat in these compounded is greater than in simple Feavers, because the heat of the Tertian is every other day joyned with the heat of the continual: Hence the symptomes of heat are vehement and alter the body and the excrements, and weaken, and cause swooning at their meeting. And *Rondoletius* made a swooning Feaver one with a semitertian.

Epiala *a sort of semi-tertian.*

A swooning Feaver is a sort of semi-tertian.

An Intermitting Feaver compounded with an Hectick.

Also an intermitting Feaver may be joyned with a Hectick which it caused, this is known by great leanness, and in the day of rest the lingring Feaver wil be present which is known by the pulse and other signs. And so also you may know when a Hectick comes after an intermitting Feaver.

Accompanied constant Feavers

They are called continual accompanid Feavers, when there is another disease from them, or causing them, adjoyned. These have distinct symptoms that come from that Disease and change the the nature of the Feaver. Of this sort some are pure others impure, malignant, pestilential, venemous, and hectical; if these Feavers go before the disease they are called *Primary*, if they follow, *secundary* and *symptomatical*. And they differ in that the Diseases accompanying are apparent outwardly, as Inflammations or Tumors, as Carbuncles or Spots: Or are inward, as Pain, Cough, ill habit, and shew themselves by things voided.

An Ephemera *with an external Inflammation.*

Somtimes a day's Feaver called *Ephemera* or a *Synochus* follows an external Inflammation and hath its accidents.

But if Inflammations come from a poysonous sting or bite, and have a Feaver, it is called a venemous Feaver, this staies not above a day and hath grievous accidents, as Trembling, Convulsion, and the like.

A pure Synochus *and Carbuncle with an external* Erysipelas.

A pure *Synochus* sends forth an *Erysipelas*, and this denominateth the Disease the Germans call it *Carfunkel* or Carbuncle, like a jewel or Hyacinth of a red yellowish color. This goes on as a simple *Synochus*, and is ended or changed in some few daies: And hath the like accidents, sending also forth a Tumor, the same day or the second or third day, or inflammation in the Legs or Face, seldom in other parts; and the kernels thereabouts do swell. These remain somtimes after a Feaver, as we shal shew in Tumors.

An Ephemer, pure Synochus, Pestilential, or venemous, joyned with a Carbuncle.

An Ephemera or pure Synochus produceth a Carbuncle, as the other, an Erysipelas thus differing; it comes under the Ears, in the Arm-pits or the Groyns, with pain and redness. This Feaver is called by the Germans *Carbuncle* as also the *Ephemera* and *Synochus*.

Also a Pestilent Feaver sends forth one or more Carbuncles or Bubo's at the first, or not long after, in the Groyns, Arm-pits, and behind the Ears, with pain, these continuing and being inflamed turn Apostems and are grievous, and bring a new Synochus. Sometimes they lie hid, especially in fat men, and discover themselves only by pain and redness of the part.

We shal shew in the Causes how that great pains may be in both Groyns in a venemous Feaver.

An Anthrax or Carbuncle may be with a pure, or putrid, or malignant pestilent Feaver.

Anthrax comes often forth in some Feavers, especially Pestilential; at first it is but like a Wheal, itching and burning, and after it is an hard Ulcer. From this we have often observed (which is a deadly sign) a long red line to the Bubo commonly accompanying it, or to the heart.

Somtimes a continual, putrid, or single, or malignant Feaver goes before an Anthrax, not pestilential, and follows not except there be great burning.

A Feaver, Synochus putrid and malignant accompanies the small Pox.

Ecthymata or small Pox are thrust out by some continual Feavers, and they are commonly putrid malignant, few children escape them, and many are infected in a place, aged people have them seldom. These Feavers are shorter somtimes in which the pulses sooner come forth, somtimes longer, and then they come forth slower. And the Feaver lasteth a week, and longer in people of years. They end without a Crises certain, but by degrees and with a stinking flux of the belly somtimes.

The accidents are the same with those of Synochus putrid, but milder in Children, greater in men; and worst when most malignant. They come forth the third or fourth day without a Crises or loss of the Feaver, over most part of the body, til they turn to matter, and then depart, as shal be shewed.

There hath been a pestilent Feaver like small Pox which hath killed many Children and some men.

A Synochus pure, putrid, malignant, pestilent, or venemous is joyned with the Measles.

The Measles come from the same Feavers, and as the other are pusles, so these are spots, red and broad over the body, and especially the Face and Breast: Some Children have them both but at divers times, the Feaver is alike in both.

In putrid malignant Feavers, red spots such as after flea-bites, or black, or blew, break forth in the height or state of the Feaver, these are signs of malignity and Death. Sometimes there is a broad spot under the breast, as I saw in a maid before her Death, in a malignant Feaver. And in the yeer 1649. I saw a blew spot

which

which turned black upon the Heart of an old woman, before her death, and her neighbour died of a Carbuncle in that place, where it appeared ten years before, when he had the Plague.

The like in a Peſtilent feaver, ſhew the infection and death, and are called the tokens.

In venemous feavers, divers ſpots declare the Poyſon.

Alſo a ſinal *Ephemera*, or pure *Synochus* may be with the Gout, Colick, Stone, bloody Flux, and breeding of teeth, and in hard travil, but this hath no great Symptoms.

A pure *Synochus*, which degenerateth at the end, may have other pain and accidents from internal Inflamations, but if it follow them it is not long or vehement nor dangerous, but by reaſon of the Inflamation. If the feaver be firſt, and the Inflamation follow (which is ſomtimes very ſudden and doubtful, which was firſt) if there be a cough of bloody and filthy matter in the Lungs, and a pain, as the Pleuriſie; or heat and ſtretching pain in the Liver or Spleen, with this feaver, it laſteth longer, then a ſingle *Synochus*, and according to the Diſeaſe accompanying, it is longer, or ſhorter, or changed into a putrid feaver: As in the cauſes ſhall be ſhewed. The accidents of theſe feavers are leſs then thoſe of a ſingle *Synochus*, they ſeldom have the Head-ach, although the Symptoms of the Diſeaſe accompanying be great and dangerous. And they are not called by the name of a feaver. But if a doting in a true Phrenſie, or Suffocation in a quinſie, which follow theſe feavers, as the Inflamation of the Tongue follow the Diſeaſe called in High-dutch *Brenne* come here upon, the companion of the feaver is as the former. Albeit other dangerous accidents (for which theſe are called very ſharp Diſeaſes) come from the Diſeaſe.

The Tyſick accompanies a Hectick Feaver.

There is with a Cough and mattery ſpitting and Conſumption, at firſt a gentle feaver which turneth into a Hectick, this is not unlike a ſimple feaver, but kills at a diſtance. This heat being ſinal, breeds no great Symptoms, except at the night. The Pulſ is often ſwift and inequal, but not ſtrong, when the feaver increaſeth, by reaſon of the Patients weakneſs. The Urin is little changed.

Cachexy, or evil habit joyned with a gentle Feaver.

There is ſomtimes a gentle Symptomatical feaver joyned with Cachexy or evil habit, which is either when the body is ſwolen and diſcoloured, as in *Leuco-Phlegmatia*, or grown leſs, as in *Atrophy*, the heat of this feaver is not ſharp, but ſo gentle that the Patient feels it not: Like a Hectick, for which it is uſually taken; It is commonly in new born Children, and when they are weaned, and in Virgins before they have their Terms. It is known by ſharp breathing, beating of the Heart, and Conſumption of the body, which is ſeen by the ſticking forth of the Sword-bone in the breaſt, and of the Ribs and Shoulders; it turns ſomtimes into a true Hectick, and is cured by taking away the Diſeaſe that cauſed it.

A gentle Feaver from the Retention of foul humors, or the like.

When the After-birth, a dead Child, or Worms, or congealed Blood is retained, there is a preternatural heat, and a Feaver known by the Pulſ and other ſigns that laſt not long, becauſe the cauſe is not of long continuance, as ſhall be ſhewed. This is at firſt gentle and Symptomatical.

Intermitting Feavers.

Intermitting Feavers, that go and come at certain times, are of one ſort, and are called impure Acute, becauſe there is an apparent moleſting heat, which is pricking and impure: Yet in reſpect of the daies in which they come, they are divers.

Theſe are ſolitary or alone, not accompanied with others, as continual feavers are; for though they produce another Diſeaſe, yet it is diſtinct from the feavers: Beſides they follow not Diſeaſes, for as we ſhall ſhew in the Cauſes, when a Diſeaſe cauſeth a feaver it muſt be continual; nor are they Symptomatical but Primary, and begin of themſelves.

But intermitting feavers are ſingle, as the continual are, in which not one alone, but two or three ſorts come in divers fits: and therefore it is called a ſingle, a double, or a triple intermitting feaver. Any of theſe joyned with a continual, is Compound, as the Semitertian, or the like, wherein the Patient is alwaies in a feaver.

The Courſe, of this Acute impure intermitting feavers, of what kind ſo ever, is the whol time of the other, ſomtimes for a week or longer, or for many months. In which time a feaver coming extraordinary in the time of the fit: by which we know the time. This is properly called the worſt time of the feaver, and the time of reſt is called remiſſion; both which are named from their circuite, which from the acceſſion either returnes the ſame day, or the following, third, fourth, or fifth.

An intermitting Tertian.

Thoſe that return the third day are the moſt frequent, called Tertians, and ſomtimes they come at the ſame hour, often ſooner: but later when they decline. The acceſſion of theſe feavers, is ſomtimes at four hours, twelve, or fourteen hours diſtance, and there are ſo many fits, or more before it ceaſeth. They are moſt in Summer, and young people: When they come in *Autum*, and in old men they laſt longer, and are dangerous.

An intermitting Quartan.

They which come the fourth day are called Quartanes and are uſual, either ſooner or later, the fits are as long, or longer then thoſe of a Tertian, and the whol courſe, ſeldom laſting leſs then three or ſix months: Somtimes above a year, or two, Theſe begin in *Autum* and ſcarſe ever leave till the beginning of the next Spring, and are more frequent with people of a middle Age.

An intermitting Feaver.

They which come the next day are called quotidians, and *Amphimerinæ*. The acceſſion is eight hours, and the intermiſſion ſix, according to the ancients, but we know it not. Theſe Quotidians are of the kind of Tertians, or quartans, not a new ſort, for if either ſeaze upon a body, and another feaver followeth, as is uſual, either preſently or a little after, of its own nature, or of another ſort; Then there being divers, one cometh one day and another the other, ſo there are divers acceſſions or fits dayly, not equal nor at the ſame hour; till one is gone and the other returnes to its former order, either the third, or fourth day: as in double Tertians, and triple quartans, but if it be a double quartan, the fit is two daies, and the intermiſſion one: If a Tertian meet with a quartan, the fit is three daies together and the intermiſſion one day, if it return the ſame day, it is not a new ſort; but when quotidians come ſooner, one may come, when another departeth. And if the later feaver, that it fal in with the former in the time of the fit, then the fit is longer: and may continue eight or ten hours, but it is two fits,

A double Tertian.

Triple Quartan.

Double Quartan.

fits, of two Agues, the one begins with a new chilness at the end of the other.

A Quintan, or Sextan Feaver.

Some return the fifth or sixth day, but they are but quartans, which staied longer away than usually.

There are divers accidents of intermitting feavers, which are troublesome, as cold, heat, thirst, Head-ach, and change of Excrements.

Intermitting feavers not only begin, but return with a cold fit first, as the continual do, with yawning, shivering, and coldness of Hands, feet, Nose and Ears, first; then shaking: the Germans therefore call it *Kaltwee* or *Frierer*, from the cold. This is greater or less, according as the Ague is. Sometimes the body is very cold, and the chilness come sooner in a Tertian, slower in a quartan, the Body shaketh, the teeth gnash. Both begin sometimes with less cold, but then they last longer; sometimes the cold is felt inwardly and outwardly also; sometimes more within or without; And when every part feels cold with heat, it is called *Epiala*. But we suppose that this is, because intermitting feavers meet in the same day, and the cold of one begins, before the heat of the other is past. Or when intermitting feavers meet with continual, as we shewed Semitertians, for in the continual, there is alwaies heat, and when the intermitting comes, it begins with cold.

An Ague, in High-dutch called Kaltwee *or* Frierer.

The heat which follows the cold and shaking, or mixeth with it, in most vehement Tertians, presently kindled, dispersed through the body, sharp, quickly at the highth, and quickly declining. In others it is gentler, not so general in the whol body, but like the burning of green wood, as in tertians that have lasted long. It is also vehement in quartans, but not equal over the body, but with mixture of cold, and as it were pain of the joynts and bones.

Thirst is the greatest Symptom in tertians and quartans; they call for drink, as for life. And sometimes in the cold fit, especially when the cold is outward and the heat inward, they desire drink.

Somtimes there is Head-ach, at first, but it ceaseth before the end.

The change of Functions, is seen chiefly in these: They somtimes dote in the time of the fit, they are unruly, and toss, when the heat is at the highth: And they cannot sleep somtimes: Somtimes they sleep too much, as in Children. They draw much breath: the Pulse at the first is small; afterwards quick and often, and great, and more or less uneven. There is weakness, except the strength be renewed, in the time of intermission: There is in some a swounding from whence it is denominated: At the end of the cold fit there are often bitter Vomitings. Also after every fit there is plenty of vaporing and hot sweat, by which they decrease, and by which they are judged: Somtimes they void much Urin often, and have somtimes the Hæmorrhoids, or Courses.

A swounding feaver, is a sort of intermitting Feaver.

There is alteration of Excrements to be seen by the Urin, which is of a yellow or flame color and substance, and in Tertians presently, or in quartans at a little distance; they turn white and waterish at first. Also a black Urin is not alwaies bad in a quartane, if the matter of the disease be thereby purged. The stools are cholerick and yellow somtimes black.

The Causes.

The first Cause of all Feavers is a Disease, which is an hot distemper or preternatural heat making all the body hotter than it should be. The heat which disturbeth the Patient is a symptom. First we shal consider the place, then the essence of this heat whether it be a Disease or a Symptom.

A hot distemper is the cause of all Feavers.

The place affected is not one but all parts of the body: not only the fleshy parts which are sooner inflamed, but the Membranes and bony parts take this preternatural heat. The heart grows first hot and then all other parts more or less begin to burn by consent, as they are by nature hotter or colder: But this is not a Feaver, except the heart be also inflamed though the whol body burn with the blood, spirits and other principal parts, as the Brain, Liver and the like. Nor can the heat of the heart cause a Feaver if it be little, or if it be short, though vehement, such as comes by Anger, or Motion, except it be fixed.

In all Feavers the whol body is the seat of the hot distemper.

The essence of this preternatural heat in Feavers is not the same in all, and the difference thereof makes different Feavers. For this heat is either adventitious and mutable, which is called a fiery heat, and that is either pure and single which inflameth only the body and causeth pure or not putrid Feavers. Or impure and mixed with putrefaction, infecting the body, and making putrid or impure Feavers. Or it is malignant and putrid together, or alone, and infecteth, causing malignant putrid, pestilent and venemous feavers. Or this heat is fixed and constant, or a change of the temper of body into a more hot, hence come those called Hecticks. How these come, whether of pure heat, or filthy, shal be shewed in these three causes.

A pure simple heat when it only is a little increased, first in the Spirits and Blood, Veins and Arteries, and so sent to the Heart and fixed to the matter that nourisheth it, and so communicated to all parts causeth pure, simple and continual feavers; when the heat being once kindled goeth not out till it be quenched. These are either solitary, or without any other disease in their course; or accompanied with another disease that went afore or cometh after. The cause of this variety is when the cause of the disease is either in the vessels or out of them.

A pure heat is the cause of pure or not putrid Feavers.

If Blood is kindled or inflamed in the vessels, that is, in the Veins and Arteries, and so the heart set on fire, and a feaver produced, and it continue to the end without moving into other parts, then the feavers are called Solitary, or accompanied, or symptomatical, as they come from or not from the disease.

Heat of blood and spirits coming to the heart is the cause of pure continual Feavers.

Heat remaining in the vessels causeth solitary Feavers.

If no Disease cause these Feavers; but the blood is inflamed in the Vessels, then they are called Solitary, and Primary, being accompanied with no other Disease, or accidents: and as the heat is more, or less, they are shorter, (as for a day, except they turn into putride feavers:) or longer, when the heat is more fixed which causeth the Hectick. And this is not, as some would have it, that if the spirits are only inflamed, the heat should depart

depart in one day, which causeth Ephemeral feavers. And if the blood be enflamed, the continuing longer causeth a *Synochus*; if the heat be in the substance of the Heart, a constant Hectick: Because in all these kinds, neither the Spirits nor the Blood can be enflamed by themselves, being confusedly together in the Vessels, and the substance of the Heart must be inflamed together with them: And every Feaver, and other Disease, must have some solid part to subsist in, as their subject, and not the Spirits and Humors. But this diversity of feavers, comes from the *Cause*, from whence they proceed, and the *Subject* (which is the body of man) wherein they are.

In respect of the external cause, as it worketh these in the body, and continueth longer. These Feavers differ in time and greatness: and this external cause, is either from things without, or taken in, or from exercise.

Of things without, these by themselves inflame, as hot Air, or Water, if long continuance be made therein by accident, these vehement cold and sudden, especially taken when the body is hot, by outward Air, or Water. Because the heat being suddenly struck inward by the cold external, inflames the Spirits, Humors, Bowels and the very Heart. And this is more probable, then to say (as others) that it comes from the stoppage of the Pores of the Skin by cold, whereby the Air, which should pass through to cool and Ventilate (as they call it) is hindered, and so the blood is inflamed and putrified. But we shewed formerly that the necessity of Respiration, or Breathing was ordained not to cool the Heart, which being in health, it needeth not; and the use of transpiration was not to cool the blood, which being temperate, it needeth not; But for the Evacuation of Excrements, as we shall shew in putrid Feavers, which proceed from the want of that.

Things taken in, which actually or potentially inflame, especially if they peirce suddenly, do the same; as strong Wine, and stronge Waters drunk in great quantity, and the Anacardine Confection being very hot. And we shall shew that neither crudities nor corruption of meats, as some think, can produce these pure Feavers, but other Diseases, or putrid Feavers.

Vehement motion, especially running, by heating, may cause the same, as we see in Horses after Races, that we perceive to be feverish, from their short breath extream heat and sweating. And Women long lying in hard Travail, by a continual motion, and hard, and often throws are in a feaver, which is increased by pain. Also immoderate motion of mind by watchings, chiefly sudden motions by anger, frights, or joy, if they do not only stir the spirits and blood, but enflame the heart, also cause feavers. But we suppose that fear and sadness cannot cause these feavers, except there be also putrifaction.

From the subject Body, afflicted with these feavers, they are also divers. Any constitution is capable of them, from an external cause, by which heat being stirred up, may differ in respect of the constitution, as it is temperate, hotter, or impure.

Inflamation of the Blood, or Spirits, (from an external cause) in the Vessels may cause an Ephemera.

If a temperate body be inflamed from without, in regard that heat cannot continue long, but the body must return to its former temper, there may be a short feaver called *Ephemera*. And the heat being united, there is no great change made, and being not impure it begins not with shaking, or Crisis, and it goes away by degrees through sweat, which is caused by a gentle breathing, or exhalation from the same heat.

That is an over hot constitution, which is more fit to receive heat, and if it be enflamed from an external cause, then from the double heat comes a *Synochus* simple Feaver, which lasteth longer, and is hotter. This constitution is either Sanguin, or Cholerick.

A sanguine Synoch, is caused by blood and spirits inflamed in the Vessels from an external cause.

The Sanguine constitution, is sooner enflamed, when there is more blood or heat then ordinary. Therfore young persons and Plethorick, or full bodies, and hot, and such as want their usual bleedings by Hæmorrhoids, Terms, or at the Nose, are sooner in these Feavers. And these, by reason of the efficient cause meeting with the adjuvant, or assisting continue above one day, to the third, or fourth day, and are called simple bloody *Synochs*. These have a greater heat, and other Symptoms from the causes mentioned, but otherwise they begin and end as the Ephemeræ.

A cholerick Synoch, is caused by Inflamation of Blood and spirits in the Vessels, from an external cause.

A Chollerick constitution being hotter, is easily enflamed from the same causes, with a Feaver like a *Synoch*, called a simple Cholerick *Synoch*. And it keeps the same progress with a Sanguine except some accidents arise caused by choller by which it is turned putrid.

A Synoch which degenerateth, is caused by Inflamation of blood and spirits in the Vessels of an unclean body.

If a foul body take a feaver from an external cause, then if the blood be apt to putrifie, the feaver is no longer simple and pure, but an impure *Synoch* and of longer continuance. But if the blood be somwhat impure, and yet not apt to putrifie, then the *Synoch* is pure, but the accidents are more and greater then in the former. There is also a *Synoch* called accompanied, when nature driveth out of the Veins some of the impure blood.

The cause of pure Symptomatical accompanied Feavers, is a hot disease that enflames the blood and spirits.

If these Feavers come from a Disease and the blood being enflamed stay in the Vessels, then because they follow a Disease, they are called Symptomatical simple Feavers These are like the Ephemeral or Synoch Feavers, except they be turned into Putrid, by the Disease that caused them, or their Course, or Symptoms altered thereby.

The Diseases that cause Symptomatical feavers, are of some part, and send forth such heat, that first it inflames the blood in the part, and then the whol Mass, and the Heart; and the blood in the part is commonly more then ordinary, by reason of the Disease and pain which attracteth. These hot Diseases which cause feavers from hot humors, as Blood and Choler may produce them without corruption; for Blood and Choller only of all the Humors, can produce feavers, without putrefaction.

A Disease of Blood, is the cause of Ephemera, or Synoch.

Or,

Symptomatical Feavers.

When Blood gets out of the Veins, not from the Feaver aforegoing, (of which hereafter) but from some other cause, as heat or pain, and fals into a part where it begets either a bare distemper, which may cause a Feaver in tender bodies: or an Inflamation, or *Erysipelas* of divers

sorts according to the variety of the Flux; if it enflame it begets a Feaver, in which the inflamed blood sometimes falling out of the vessels (as hereafter we shal shew) may renew the old, or cause new inflammations. These feavers are simple and pure, not putrid, and as the heat of the Disease is, they increase or abate, and end before it be quite over except there be a suppuration or a new pain or putrefaction. These symptomatical feavers are in divers hot Diseases, of the Bowels, Membranes, and other parts. And the more vehement or long as the Disease is neerer to the Heart, and the parts adjacent, or great Veins, or as the heat is greater, or the body by nature more hot, as in Infants who have a Feaver many times only by the breeding of Teeth. They are milder and shorter when they are from the fountain of heat, or outwardly, in these there is little heat, but horror, and sometimes not that.

A cholerick disease is the cause of the symptomatical Feaver of the Ephemera or Synochus.

The Cholerick humor being most hot, seldom causeth these kind of feavers. But when it is not in its proper place where it doth no hurt, nor mixed with the blood, nor qualified with the Whey which so tempereth it that it cannot produce a feaver, as we observe in the Jaundies, but separated into sensible parts the Stomach and Guts, and gets into their substance, causing Erysipelas, about the Belly & the fever Lipyria in which the inward parts burn with intollerable heat and pain as *Aetius* observes, about those parts and great thirst, except it be cast forth by nature, it fires all the parts adjacent with the blood and Spirits, and causeth small feavers which follow such Diseases. These we often see in the disease of Choller, when it is vomited and purged, and in the Dysentery, and in the Colick coming from Choller and Erysipelas in the Guts, as we shal shew. And they cannot be great feavers because their cause is far from the Heart, and lodgeth about the Meseraick Veins,

Some Blood inflamed & sent out of the vessels into other parts causeth a Synoch primary & accompanied

If Blood inflamed from the causes aforesaid, get out of the great vessels into any part internal or external and inflame the heart, and cause a Feaver (as it usually doth by its plenty, heat, or thinness, or impurity, either at the beginning of a Feaver, or after by the force of Nature, as in the Crisis of these Feavers we may see by their bleeding at the Nose) Then it causeth a new disease in the part where it comes, and a Feaver which is accompanied therewith, but not symptomatical, because it follows not the Disease, but goes before it as I shal shew. And these observe not the course of other simple Feavers, but being increased or abated by the accidents of the Disease they are longer or shorter, greater or less: And when nature hath sent a good quantity of burning blood from the Veins, thy are not so hot, nor so thirsty, nor ful of Head-ach as in solitary Feavers. And this chiefly when the blood flows into the bowels or superficies of the body.

The effusion of inflamed blood into the inward parts is the cause of Synochus accompanied with Inflammation of the Bowels.

Sometimes this flux of blood in Feavers is into the Bowels capable thereof; especially such as are most fleshy and bloody and ful of Veins joyning to the great Veins and neer to the Heart, and chiefly into the Lungs, which it inflameth and causeth a Peripneumonia and somtimes Pleurisie (as shal be said.) These Inflammations go not before the Feavers, because the Feavers shew themselves before there is a pricking pain or signs of Inflammation, with horror and heat following, and sometimes go some hours afore: Nor are they caused by those inflammations but as they were first raised from Feavers and increased by a new heat in some part neer the Heart which shews that the Feaver did not there first begin, and that is not putrid (as others thought) because the heat raised from the Inflammation increaseth the feaver rather by its quantity then filthy quality. Nor doth it acquire or get any putrefaction from the inflammation, especially when it first comes, except the blood suppurate, and then as *Hyppocrates* saith it is increased. But we suppose this may be rather from the pain that is then increased, and not a new putrid feaver from a putrid exhalation, because it presently ceaseth. Except this happen from an Ulcer that follows these inflammations, as when a Pleurisie or Peripneumony turns into Phthisis, the feaver being turned into a putrid symptomatical Hectick, or from blood which is putrified and sent out of the Veins, as I shal shew in putrid feavers. These happen, as in the Lungs from the situation and for to receive the flux. So may inflammations which follow these feavers and increase them, be from blood in a Synoch sent into the Liver or Spleen, because they are boody parts, and have large vessels. These feavers in all the said inflammations of bowels, are longer than other solitary Synochs, in respect of the Disease accompanying them. And they vary as the inflammations are true, as Phlegmons, from whence some are called *Phlegmonodes*. Or *Erysipelas*, wherein the feaver is more sharp called *Typhodeis* though this name be proper to the feaver in the Erysipelas of the Liver. As the feavers from the Erysipelas of the Lungs are called *Cymodes*. The same may come from blood sent into the brain in feavers, which hath large cavities and is easily filled: And then an inflammation of the Brain is joyned with the fearver, which turns suddenly with doting into a Pleurisie, with a pain of the Head which went before, and caused blood to come thither and makes the feaver more dangerous and violent. This may be also in the Stomach, Guts, Womb, Bladder, when the blood is sent thither in feavers. But when another way which leads into the fleshy parts being membranous have only meseraick veins, or are far from the great vessels and the Heart, it comes to pass that when these parts are inflamed by pain which comes quickly to such sensible parts, that the feavers rather follow the Inflammation than go before them and are (as is said) symptomatical. As that inflammation which is in fleshy parts which are not so sensible of pain, comes from the feavers and is a symptom of them.

Inflamed blood sent into the habit of the body causeth a Synoch, these inflammations are red and painful.

These Feavers send blood from the veins into other internal parts, as in the muscles of the Neck and Glandules and maketh inflammations in the mouth, Tongue, and Jaws, and Quinsie. And though they begin not from feavers but other causes, yet when a feaver comes, they increase. Sometimes these feavers go before pains and swellings of the Gout, when Nature by them drives blood into the Joynts, and then they are red and swollen except the tumor lie very low. So that such as are inclined to the Gout (being easily taken with this Feaver Nature being used to disburden her self into the outward parts, joynts, or skin) are subject to these Diseases. Also, albeit these feavers go

before

before Defluxions or Catarrhs, and promote them, yet becauſe they do it not by affording matter to them, but by moving the flux with their heat, they are not differing from ſolitary feavers, though they may alſo be joyned with other diſeaſes.

Inflamed blood in a Feaver ſent to the ſuperficies of the body is the cauſe of Synoch with a Botch, Eryſipelas, ſmal Pox, Meaſles or Carbuncle.

Nature doth often diſcharge blood into the ſuperficies of the body, the Skin eſpecially Glandules, and internal Membranes in theſe Synochs, and cauſe there Redneſs, Heat, Tumors, or Puſtles, ſooner or later, and as the blood is Pure, Thin, Thick, Yellow Black or Wateriſh; or impure, yet not putrid (as we ſhall ſhew) the Tumor and Heat and Pain are different. This Difference is chiefly in reſpect of Tumors and Puſtles.

Theſe Feavers often produce Tumors or Redneſs called Carbuncles. Theſe are ſo uſual to ſome Natures (by reaſon of the Heat, Thinneſs and Wateriſhneſs of the blood, or Impurity) that they have them upon the leaſt occaſion at certain times if the blood be but a little inflamed; nor do they ſpare old or gouty people. They are diary as we ſhewed, and a Tumor follows them, ſeldom the ſame day, but two or three daies after, either in the Glandules of the great Veins, in the Groyns, Arm-pits, and Chine, if blood go along with them: And theſe are with pain, and ſometimes with inflammation. The blood often falling into the loweſt parts of the Legs, there is often an itching and then a burning in the Ankles, and after a redneſs with Yellow or Black as the blood is in thickneſs, if it be an Eryſipelas. Somtimes it ſwels and is inflamed if it be an Eryſipelas with a Flegmon, when better blood flows thither, and if the blood bewateriſh, the whol Leg ſwels with an œdematous Eryſipelas. Theſe have a Bubo or ſwelling in the Groyn going before them; the feaver commonly abates at their coming forth, ſo that former Writers were deceived that thought the feavers began with them, and were ſymptoms to them, which are the contrary, for the feavers appeared before there was ſign of inflammations. And if the Glandules only ſwel, there is no great heat, and it cannot be from a feaver.

The ſmal Pox, though it be uſual in malignant feavers are ſomtimes in pure feavers: And the Meaſles in Infants by reaſon of the fulneſs of blood or diſpoſition to be inflamed, they come forth the third or fourth day, but in a pure feaver they are not infectious, and depart themſelves.

Nature labors alſo to do the ſame in Synochs, not putrid if the blood be black which it deſires to expel, by a Carbuncle not peſtilential either alone, or with a Bubo. And many fear they have the Plague through ignorance.

A putrid heat cauſeth putrid Feavers.

A Heat mixed with Foulneſs firſt raiſed from putrid humors or parts of the body, and ſo carried to the Heart; and inflaming it, and ſent from thence to all the parts of the body, cauſeth putrid feavers, which continue or return while the putrid vapors or humor go to the Heart; which they wil do, becauſe they are bred in the Veins and Arteries by which they may be directly carried therunto: For theſe go to the heart with great Orifices conveighing humors and ſpirits into it, and they cannot be carried another way. For if a ſtinking Vapor could paſs the the cavity of the Breaſt another way into the Heart to inflame it, we ſhould alwaies have a Feaver from the vapors ſent from the Excrements, which though thin and hot, ſo that they may be let flie, and burned to flame, yet cannot reach the upper parts to infect them, unleſs it be by making a ſtinking breath: As we ſhall ſhew. And although a poyſon or venemous quality can reach the heart whereſoever it is bred, or by any paſſage, yet theſe vapors bred in a thick putrid matter conſtrained to a certain place, but by the manifeſt paſſages aforeſaid. By which means as a ſimple heat ſent to the heart in the ſpirits and blood cauſeth a pure ſimple Feaver, ſo doth a putrid vapour, or matter by the ſame way, cauſe a putrid Feaver; which is divers according to the divers places, in which the matter is bred, which matter alſo is not alwayes of the ſame Nature. The ſtinking Matter is either bred in the veins or arteries, or out of the veſſels in the humor of ſome part, or ſubſtance thereof.

The Humors that cauſe putrid Feavers, either putrifie in the veſſels, that is the veins and arteries, either continued to the heart, or in them that are not joyned by continuity to the heart, but can ſend a vapour by veſſels that are continued. And this is cauſe why among putrid Feavers ſome are continual, others intermitting.

Foulneſs of blood in the veſſels continued to the Heart is the cauſe of putrid continual Feavers.

The veſſels continued to the Heart are the Veins and Arteries except the Meſaraicks. If any humor putrifie in theſe, being largeſt and diſperſed through the whol body, becauſe the way is open to the Heart, the vapor and part of the humor go to the Heart and ſets it on fire, cauſing continual feavers, becauſe the cauſe is included in the veſſels. Theſe if they kill not by the vehemency of the cauſe and the Diſeaſe, or melt the body with heat, go ſlowly off, and and continue til the heat of the Feaver hath conſumed the matter by Vapors, and Nature hath made Concoction of it and diſcharged it by a perfect Criſis.

The humor putrifying in the veſſels, is blood, which being too hot and moiſt, eaſily putrifieth, as we may obſerve by it out of the veſſels. But all wil not putrifie but from a great fault, but a little only: ſome remaining good (though by reaſon of the Diſeaſe and faſting the Patient gets no new) and this is ſeparated from the bad into other places: And if it were mixed and grew hot, yet it did not ſtink, but the filth being ſeparated it returns to its former purity. As we obſerve in letting blood it flows ſomtimes pure, ſomtimes impure, and ſomtimes confuſed or mixed. Moreover though blood hath divers parts, yet one cannot be corrupted alone, but all is made thinner, thicker or fatter rather than cruder (which cannot make perfect blood as I ſhewed) for the blood in the Veins is made of them not diſtinct but confuſed or mixed (though they ſeem divided) in cold blood; and there is no part of blood but is made of them. This is manifeſt by the Urin and Sweat when the ſerum is putrified. Hence are divers ſorts of putrid feavers, not becauſe divers parts thereof called humors, as Blood, Flegm, Choller or Melancholly are corrupted, but from the place in which the humors putrifie, and the diverſity of the blood ſo corrupted.

There are diſtinct Feavers in reſpect of the place wherein the humor corrupteth, firſt in the reſpect of the veins and arteries.

The corrupt Blood that cauſeth putrid Feavers, is conſtantly in the branches of the hollow Vein, and in the greateſt of them, in which more may be contained and from which the Heart may be ſooner reached which cannot be done in the leaſt branches. Therefore

fore in the trunk of the hollow Vein, which passeth upwards and downwards from the Heart, by the Backbone, or in the great branches that come from it into Throat and Groyns, this corruption of blood, being contained and alwaies disturbing the heart; it causeth divers putrid feavers, as the filth is nearer, or further the Heart.

Corruption of blood in the hollow Vein near the Heart, is the cause of putrid Synoch, causon, Leipyria.

Any corruption near the Heart which sends it self, or vapors to it, maketh a *Synoch* feaver, which increaseth, or decreaseth, or stands at a stay, according to the corruption. And in a causon, or bruning feaver, because its heat is near the Heart, there is no manifest change, because the heat is equal; especially when the heat is at the height and cannot be raised, but by death. Yet the Patient may find about the Breast, Midriff, Back, where the corruption lodgeth, a burning which troubleth the Heart and parts adjacent: And this is the cause why in a *Leipyria*, which is a sort of causon that the inward parts do burn.

Blood corrupted in the hollow Vein remote from the heart, is the cause of a Synoch exasperated.

When the corruption is in the branches of the hollow Vein distant from the Heart, because it causeth not so much heating, it begets Feavers with fits, which have different heat. For when the Vapors, whose matter is forced of, are hindered by the long passages, and cannot come in order, and the same measure to the Heart, it comes to pass when it is increased it comes with more violence and encreaseth both the heat and fits, without horror, as at the first, because the feaver was before. These fits go away when the Vapors are discussed, but not the feaver, for heat once kindled, although the cause abate, cannot thereby be extinguished: as we shewed concerning simple heat from an external cause, which cause being removed the Feaver ceaseth not, till the Heart return to its former temper. And this is the true cause of fits, which come somtimes twice in a day when the stinking vapor is much and not far off: and the other day once, because the day before some part was discussed, and keep or change their course in respect of the cause which acteth. Also when the cause is far of, or is less, the fits come every third day at first, and so continue for a time, seldom the fourth or every other day. For which causes these putrid continual Feavers are called ordinate, or inordinate quotidians, Tertians, or quarrans. But in those whose cause lurketh in the Veins remote from the Heart, there is a heavines, or pain, or burning in the part, where the matter lodgeth in the Neck, Loynes, or Joynts. There is alwaies a pain of the heart also, not that the matter lodgeth there, but from the hot Vapors.

A Portion of putrid blood which causeth a putrid Feaver, sent from the hollow Vein into other parts causeth continual Feavers accompanied with other Diseases.

Also in all these putrid Feavers whether the matter be near or far from the Heart, a part of it may be forced by nature out of the Veins, as in pure Feavers, by which she is disburdned into some internal or external parts, producing Tumors, Pustles, or Spots, which are not signes of Inflamation, but Putrefaction. As in Children, the final Pox and Meazles break forth (as *Fernelius* saith) plentifully in a Feaver, like a putrid *Synoch*: but they are not infectious, but in Malignant Feavers.

It is a question whether blood can thus corrupt in the Arteries to cause Feavers. For it being hot and spritful, may easily burne and conveigh a a simple pure Feaver to the Heart, but it can scarse alone, or seperated from the blood of the hollow Vein, which is very pure, be corrupted; though with it, it may, or be infected by neighboring humors: especially because vapors that come from putrid blood, are carried that way to the Heart, both in putrid and intermitting Feavers. But if corruption should be in the Arteries, from the causes aforesaid, the feaver will be most violent: as in a causon, when corruption is in the trunk of the great Artery near the Heart. These feavers also differ in respect of the blood, in respect of its temper, or distemper, before it caused them.

Corruption of blood in the great Artery causeth a burning Feaver.

Temperate blood which offendeth only in quantity and which is not naturally inclined to putrefaction, if it corrupt, causeth a putrid *Synoch*, which is either made so from a Simple *Synoch*, wherein the blood was first inflamed, and then corrupted, or from the external causes at the first. Therefore some call the beginning of them, putrid Ephemera, which come from outward Causes. But we, because this putrid heat ends not in one, or somtimes many dayes as a simple doth, cannot call the ephemeral, but putrid Synochus, because in them the heat is milder then in other continual putrid Feavers, and more equal, from the temper of the blood, having no fits from the equality of the blood, and because being near the heart in the great vessels, it is first afflicted with the external causes, and so the heart beats with an even Pulse: As we shewed.

Corruption of temperate blood in the Vessels, is the cause of a putrid Synoch.

If the blood be distempered, before it corrupt, it must be hotter then ordinary, for if it be too cold or crude, it rather causeth Cachexy or ill habit of Body then Feavers. And if it be so, before the feaver come, whether it be too thin or too thick or corrupted, it causeth Inflamation, and the more when it is in the Arteries, or any place near the Heart, hence come burning feavers continuing in the same state, so violently burning that except they kill, the substance of the Heart is melted away therewith and dryed, so that the whol body consumeth, as we shewed in a melting feaver.

Corruption of hot blood in the Vessels causeth a burning Feaver.

Corruption of hot blood in the hollow Veins and Arteries near the Heart causeth a melting Feaver.

Præternatural Heat or fault in the blood is the antecedent Cause of Corruption of it in the Veins.

If the blood beinflamed with heat, we shewed, that it caused diary feavers, within a sanguine and full Body, as we shewed in a simple Synoch, except the heat abate of it self, or by cooling medicines, cause a suppuration, either in the blood or in the parts. So that the mass of blood being corrupted by long heat, there is not a simple heat but a compounded feaver, with putrefaction. And this is the cause why a Synoch not ending the second or third day, becomes putrid. This is known by the signs of an Ephemera and simple Synoch, the one whereof is, that the heat began externally. And this is the reason why fulnes of blood which many say is the cause of putrid feavers, causeth a change of simple feavers into putrid.

Foul or evil blood, which hath the seeds of corrup-

tion

tion in it, or is diſpoſed thereunto, if it be gone ſo far by its plenty or corruption, that nature cannot order it, that is amend or purge it, cauſeth by putrefaction divers putrid feavers differing according to the place wherein, or the matter of which, the putrefaction is. Theſe are foreſeen before they come, by a conſtitution, not perfectly ſound, nor ſick, by reaſon of ſome ſecret fault in the blood: in which there is a lazineſs, havineſs and pain of the Head, troubleſom dreams, ſtretching of the ſides or Hypochondria, Heart pain, Nauſeouſneſs, loathing of Meat, change and ſtink of uſual Excrements, or not uſual as ſweat, ſpitting, vomiting, belching. This fault of blood comes either from things taken in, or from Excrements retained, or from outward things.

Things taken, as meat and drink, which are the matter of which blood is cauſed, if they be of evil juyce or corrupt, cauſe this fault in the blood.

Meats of evil juyce, though after they are eaten they are ſomwhat changed by concoction, and turned into blood, yet in regard the former condition remains, if they be often taken produce theſe putrid feavers: which are popular or common, when the meats ordinary eaten by moſt people from neceſſity, are ſuch, as Herbs and Fruits, or Corn eaten in too much plenty, when unſound, as in time of dearth, theſe infect the blood, and cauſe Epidemical Feavers in Cities and Armies.

Alſo if the food be naturally good, and be putrified before it be taken, it infects the blood. As when they are too old or corrupt by too much moiſture, whether Fleſh, Fiſh, or Cheeſe, by ſtink and Putrefaction, being long taken, infect the Blood, and cauſe Feavers. And common Feavers come by corrupt Water, Bread, or Fleſh at Sea, or from Corn, that is mowed up wet.

Thoſe moſt eaſily corrupt, being eaten, which have much Excrementitious moiſture, as ſummer fruits, the eating of theſe in ſummer abundantly, cauſeth Feavers in *Autumn* or the Spring following. Things that nouriſh, as Milk and Eggs, or ſweet things, ſoon corrupt in hot Stomacks, and turn to Choler, which cauſeth other Diſeaſes rather then Feavers: So do hard Meats and ſlimy, when the Stomack, Liver or Spleen are afflicted, for want of concoction cauſe crude blood and obſtructions rather than Feavers: Except there be other accidents.

The retention of the Vapors and Excrements of blood uſually ſent forth by inſenſible Tranſpiration, or ſweat infects the blood and cauſeth Feavers. This may be from divers cauſes, from idlneſs and ſluggiſhneſs of nature in expelling of Excrements, obſtruction of the Skin and pores thereof, and want of Aire. Not that the blood is inflamed and then corrupted for want of Air through the pores to cool it, as we ſhewed in the cauſes of a Diary Feaver; Nor that it can come from a ſudden cold taken in while the body is hot. But becauſe the skin being made thick, the Excrements uſually purged by the pores cannot come forth. And becauſe the body cannot be refreſhed with Air, to conſume the moiſt Excrements under the skin; As we may obſerve by things kept in cloſe places, where freſh Air comes not, they grow mouldy and muſty: ſo by the long retention of theſe moiſt Excrements, for want of Air the blood may be infected, and Feavers follow.

When the Air is infected with evil Vapors from ſtinking Carkaſes, and taken conſtantly into the body, it infects the Spirits, Blood and Heart, and cauſeth putrid Feavers, and they are ſomtimes popular, when many live in it, and are diſpoſed for it. Or contagious, when the putrefaction comes from the breath or ſweat of ſick men. This is from a malignant or venemous quality, rather then a ſimple corruption.

Corruption of blood in the meſeraicks, is the cauſe of intermitting putrid Feavers.

The veſſels not continued to the heart of veins and arteries are only the meſeraicks, branches of the gate-vein which comes from the liver, diſperſed through the bowels in the lower belly, and no where elſe, never coming forth to the skin but in the Fundament, where they are called *Hæmorrhoids*. For the Arteries which accompany theſe, as alſo thoſe that accompany the branches of the hollow Vein, coming all from the great Artery, are continued to the Heart thereby. Therefore if a humor corrupt in the meſeraicks; though their paſſage be intercepted by the ſubſtance of the Liver, in which all their branches are, yet becauſe the branches of the hollow Vein are alſo in the ſame ſubſtance of the Liver, and are joyned to the mouths of of the branches of the Gate-vein, and becauſe there is a conſtant paſſage of the Blood in the Liver by them: And alſo becauſe the Arteries coming to the Heart, are joyned to the Meſeraicks in the Spleen, Stomach, and Guts. By this communion and vicinity it happens, that as oft as evil vapors riſing from the Meſeraicks, do fill the branches of the hollow Vein and great Artery, they paſs that way to the Heart, and cauſe putrid Feavers by their ſtink; but theſe are not continual, but intermitting. And becauſe the putrid Matter is not far from the Heart in continual Feavers, they may a little intermit, but not wholly ceaſe: For the Heart once on fire, before it be wholly quenched, and a new vapor in the Veins that come unto it, muſt have fits at certain times: As we ſhewed. Alſo this is from other Cauſes, a filthy vapor in the Meſeraicks, which cauſeth a Feaver, which doth not conſtantly touch the Heart with the ſame force, by reaſon of the diſtance, this is not alwayes unequal, but wholly ceaſeth, by reaſon of the ſtoppage of paſſages to the Heart. And ſo long intermitteth while the putrid Matter confined to its fire, ſwells, and ſends forth a vapor to the Heart, with ſome of it ſelf. For it being abundant, and of an evil quality, provoketh Nature to ſend it into the branches of the hollow Vein and great Artery, and ſo into the Heart, where it cauſeth Feavers, to continue ſo long, till all the fuel be burnt up, or ſweat out: After which manner a Feaver wholly ceaſeth, till a new fit cometh by a new motion and heat of the Matter, ſooner or later, and not in the ſame form: As ſhall be ſhewed. Now let us conſider what humor it is that putrifieth in the Meſeraicks, what is the conjunct cauſe of intermitting Feavers, and the antecedent Cauſe of Corruption.

The humor contained in the Meſeraicks is Blood, yet not ſo pure as that in the Liver purged from the wateriſh and cholerick Excrements, and fit for nouriſhment, although ſome part of it for nouriſhing the membranes be pure, it is wateriſh, and ſome part thick, it is full of excrementitious Humors that paſs with the Chyle, and being purged from theſe in the ſecond concoction it is ſent into the hollow Vein. Theſe excrementitious Humors ſeem whey-like and cholerick, for Serum or Whey coming from much drink, and moiſt food, and paſſing through the Meſeraicks, and carrying with it other crude humors, paſſeth in greater quantity to the emulgent Veins, and ſo to the Reins and Bladder. The cholerick Matter, riſing from Meats and Drinks mixed with Blood, is firſt purged by the liver, and then ſent to the Gall. Beſides theſe two Hu-

mors for which nature hath made two receptacles, we can find none; nor can we by reason or sense perceive that the Spleen was ordained for that purpose. Therfore a putrefaction in the Meseraicks nor in the hollow Vein cannot be distinct in any part of this blood, or in the excrements mixed therewith, but must needs corrupt the whol mass. And if it come to the height that it sends most hot vapors (which only can reach the Heart) then it produceth these fevers. Nor can they come from a crude or wateriſh blood which wil not so corrupt and grow so hot to send such vapors, but other Diseases may. As when the matter which aboundeth in this blood is cholerick, and is not sufficiently clensed in the Gall, but makes the blood too cholerick, and putrifieth it, then causeth intermitting Fevers by hot and subtile vapors sent to the Heart. And for this cause we affirm that this blood corrupted with yellow or black Choler, such as we have seen voided by the Hæmorrhoids in the Cure of sich fevers; and Children have voided abundantly by stool, causeth these intermitting fevers. Thus, The cholerick blood being long in the Veins before it produce a fever, at length corrupting, and swelling and burning about the Midriff, and sending forth dry vapors (which first offend the sensible Nervous parts) by pricking the expulsive faculty causeth cold at the beginning of the fit (the heat being sent in with the blood) and when nature strives to shake off that which offendeth yawning, chilness, shaking; as we may observe in other places when any sharp matter strikes upon sensile parts the body shivereth, also Vomiting is often in the beginning from the stirring up of the expulsive faculty. These are at the beginning, but after when the Vapor from the Midriff ascending to the Heart by the waies aforesaid, enflameth it, a heat follows, and the cold and shaking ceaseth, except the Vapor go so soon to the Heart that the heat appears before the cold be gone, and there be both heat and cold at the same time, as in the fever *Epialus*. This heat being raised from the Midriff, the whol body is inflamed, a great thirst and other accidents from heat continue so long, til the Vapors being discussed by insensible transpiration or sweat, the fever departs or intermits, so long til new matter corrupting in time of rest, cause as many vapors as may make a new fit. And this course of fits continueth till all that matter which was apt to corrupt be taken away by help of Nature and the Physitian, for in every fit part of that cholerick matter corrupted is turned into a Vapor & discussed by heat, or sweat or t, or pissed forth, the Urin being after the fits yellow, red, sharp and stinking: sometimes the whol Disease is dissolved by sweat; and if any thick part of the choler stick in the skin, there followeth the Maunge or Scab, or the like: somtimes by vomiting flegm and choler sent into the Stomach from the Gall is voided by wh ch the cause is taken away and the Ague cured. These are by Art or Nature separating the feverish matter from the blood in the Meseraicks, and the Vomits and Stools are bloody often, when there is a Cure, but it is dangerous because the way is not ordinary, except the cause of the fever come forth with blood at the Hæmorrhoids, by these means we have seen quartans cured, which could not be by other bleeding, which draws from the branches of the hollow vein only, and the Meseraicks only appear at the Hæmmorrhoids. Nor can the cause be so taken away, except when the branches of the hollow vein are emptied, the feverish matter gets into them out of the Meseraicks. But if there be such a passage, and the putrid blood be mixed with that in the branches of the hollow Vein, an intermitting fever is made a Continual as I have often seen by unseasonable bloodletting, when the cholerick matter is purged from the blood and the blood tempered with serum and carried thereby into the branches of the hollow vein, and so into the habit of the body and Urin which it tincture th, then the fever either ceaseth with the Jaundies if the the whol cause be carried thither. Sometimes this matter is infused into the fibres or final veins of the Guts and produceth Erysipelas and Colicks, the fever ceasing or not as the matter is wholly or in part carried away: from whence if Convulsions arise they are dangerous as I shewed. *Fernelius* saies that he found a pound of this cholerick matter about the Membrane of the Liver and the Nerves of the Back in one that he dissected after his death of a Fever. Therfore if cholerick blood corrupt in the Meseraicks, it is the true cause of all intermitting fevers, they come and go, by reason of stoppage of the way to the Heart and thinness of the Vapors. The diversity of them comes from the diversity of the place and matter.

The matter of this putrifying cholerick blood is not alwaies the same, but as we see choller separated from the blood, is now yellow, now green, and black, thicker or thinner, so is this divers in the Mesaraicks, especially thinner or thicker.

Corruption of thin blood in the Mesaraicks causeth an intermitting Tertian exquisite when pure. Nothus or Bastard tertian when impure.

The Corruption of thin choller in this blood before it can cause a feaver, must be three daies after the first Corruption is discussed; hence it is called a Tertian, which comes every third day. And if as much be corrupted as before it comes at the same hour; or if more be corrupted, it comes one hour or two sooner; when less corruption or matter for it remaineth, the fits are later and the feaver decaies. But as this chollerick matter is pure or impure, the course of the whol feaver and its fits varieth.

Pure Choler which is mixed with blood being hot makes an exquisite Tertian: and because the vapors are sooner discussed the fits are shorter, and the feaver lasteth scarce seven fits by reason of the quick motion of the matter.

If it be impure mixed rather with crude than flegmatick humors and blood, it causeth a bastard tertian, in which the fits are longer, more disorderly and the fever longer, because the matter is much and unequal.

Corruption of thick blood in the Mesaraicks causeth an intermitting quartan, or sextan exquisite or Nothus as the mater is pure or impure.

If the Choller be thick and burnt; because it is longer corrupting, it requires a longer time to get to the Heart to make a fever, therefore the fit is not til the fourth day, and it is called a Quartan. This comes sooner or later, is exquisite or bastard, hath a shorter or longer course for the same cause that a Tertian from which in heat and other accidents it is much different, only by reason of thickness of the humor it is longer and worse to be abated. And if the matter grow so tough that it corrupteth not under five or six daies, to send up vapors that cause a feaver, then these feavers which are rare are called quintans or sextans.

These vary according to the place as the matter is in one or divers places.

If in the same it putrifie, the feaver is a simple-tertian or quartan, exquisite or Nothus in respect of the matter.

If in divers places, it wil be either in the Mesaraicks only, or also in the branches of the hollow vein.

If

The cauſe of a double tertian or triple quartan, or confuſed, is when thin blood putrifieth in one place and thick in another place of the Meſaraicks.

If Choller corrupt in the Meſeraicks only not in one but two or three places about the Liver, Spleen, Meſentery or Caul, the feaver is double or treble, and one ceaſing another follows the the next day, or the ſame. Hence it is that Quotidians are, not as ſome talk from flegm though they cannot prove it, for they are double tertians or treble quartans, which have every day a fit or more, for I obſerved in a double baſtard tertian two fits in a day, and three in twenty four hours. And to theſe may the double quartanes (which come two daies and intermit one) be referd, and as theſe are when Choller of the ſame nature corrupts in divers places. And when the Choller is divers in divers places, as thick in one, thin in another, there are Tertians mixed confuſedly with Quartans divers daies. Theſe are known by their ſymptoms.

A ſemi tertian is cauſed by corruption of blood in the Meſaraicks and veſſels continued to the Heart, at the ſame time.

If blood corrupt not only in the Meſaraicks but Branches of the hollow Vein, then there is a continual with an intermitting feaver called a ſemi tertian; where in reſpect of the diverſity of the matter tertians or quartans, ſingle or double, baſtard or legitimate, are joyned with a continual feaver, that either hath no fits, or upon certain daies. Hence it is that the feaver is alwaies either with ſharpneſs from the continual, or fits from the tertian.

The antecedent cauſe of this corruption in the humors of the Meſeraicks which cauſeth fevers is either efficient or adjuvant.

The efficient is meat and drink by which hot, ſharp, chollerick or burnt juyce is bred in the ſtomach or firſt paſſages. This being long gathered nor wel ſeparated from the blood, but in the Meſaraicks or another place, or divers, when it corrupteth it cauſeth feavers agreeable to its humor ſhorter or longer, or otherwiſe differing. This juyce comes from food that hath ſuch in it ſelf, or gets it by corruption.

Theſe have ſharp chollerick juyce, Onions, Garlick, Leeks, Rotten Cheeſe, and like, naturally.

By corruption theſe turn into ſuch juyce, eſpecially in hot ſtomachs. Sweet things which eaſily turn into choler, and fat. Raw fruits, by eating whereof in Autumn come Dyſenteries or bloody fluxes from choller, and alſo quartans. Alſo other moiſt meats as Eggs and Milk, which nouriſh much, by corruption turn into ſharpeſt choller; of which this filth proceeding if it be not purged, it is carried into the Veins and, gets feavers, though the vulgar impute them to other cauſes.

The cauſe adjuvant is the diſpoſition of body in reſpect of conſtitution or ſeaſon.

They who are hot and chollerick are ſooneſt taken, and they of middle age, and Infants by intemperance, and have the matter from the Womb like black chollerick blood, and bring theſe feavers into the world with them. Somtimes they ſuck them from their Nurſe, as *March* 27. 1640. I had a Son born in the ſeventh month when the Mother had the third fit of a baſtard tertian, which had at firſt the feaver at the ſame time with the Mother, and two fits after, it had ſucked, and in the third with ſome light Convulſions it departed being not fourteen daies old. Sometimes old men have them, but they are ſeldom. The hotteſt time of the yeer and when the diet is worſt, is the time to get Agues in Autum tertians and quartans are uſual by reaſon of the Summer Diet, in Spring and Summer, Tertians are frequent.

Corruption out of the Veſſels is the cauſe of gentle ſymptomatical Feavers.

Putrefaction out of the Veins and Arteries cauſeth feavers, when it ſends evil vapors or corruption to the Heart and afflicteth it with a ſtinking heat, hence come ſymptomatical feavers which follow a diſeaſe cauſed by this corruption. Theſe are gentle and unequal, becauſe the matter out of the veſſels, cannot ſend to the Heart ſo much as when it is in the veſſels, nor keep that order: theſe are quicker or ſlower to the taſt, as the matter is; either in a Natural or Preternatural humor, or a Natural or preternatural body or part thereof.

Corruption of ſome humors out of the veſſels cauſeth gentle ſymptomatical Feavers.

When a few humors contained out of the veſſels corrupt without the putrefaction of the parts containing they cauſe putrid feavers. Some ſay all humors whether hot or moiſt being corrupted out of the veſſels wil cauſe it, but this we ſhal examin. Theſe are hot, *viz.* natural blood falling out of the Veins, and divers cholerick excrements, Theſe are moiſt, the wateriſh and flegmatick humor.

If blood flow from the veins into any part and cauſe inflammation it cauſeth only a pure ſymptomatical fever and not a putrid though it corrupt, except the part corrupt alſo. But if blood coming from veins open or broken congeal, and by continuance corrupt, eſpecially in great quantity, and in a place neer the Heart, as in the breaſt and Lungs, then putrid but gentle Fevers follow theſe Affects or Diſeaſes, but ſeldom when it is in the ſtomach or Guts, becauſe it cannot ſtay long there; or in the Reins or Bladder, becauſe the Urine waſheth it away.

If either that Choler which comes from the Meſaraicks into the Gall or Spleen to be purged as they ſay, or that which breeds in the ſtomach of things eaten; either corrupt in its own place or in another, ſome think it begets putrid Fevers if yellow, Tertians, if black, quartans, exquiſite or Nothus as it is pure or mixed. But we not obſerving any ſuch black Choler in the ſubſtance of the Spleen, and perceiving no Gall or Bladder to receive it, as there is for the yellow Choler in the Liver, and knowing that the uſe of the Spleen is more excellent than to be the Receiver of Melancholy, nor finding any other black Choler than that which is made of the yellow, cannot be convinced, that ſuch a humor in the Spleen can produce either quartan or other Agues. And if they call the melancholick juyce corrupted ſo, and make it the cauſe of a quartane, we wil not grant that to be in the ſubſtance of the Spleen or elſwhere diſtinct from the blood whoſe dreg it is. But if they underſtand by it, the thickeſt part of the blood, in that they confirm our Opinion which teacheth that ſome of the blood in the Meſaraicks corrupting cauſeth intermitting fevers: becauſe Fæculent blood is rather in the great Veins of the Meſaraicks than in the ſmal of the Spleen by reaſon of the plenty of Arteries filled with thin rather than thick blood; In which Meſaraicks if corruption in the dregs of blood cauſeth quartans, as they grant, then they muſt confeſs that the cauſe of Tertians is from the ſame blood, but in a divers part as we ſhewed: But we do not affirm either excrementitious choler gathered out of the Veins, whether yellow, green, or black, to be the cauſe of intermitting fevers if it putrifie, in regard

gard it is a very hot and sharp humor being in the Belly, especially if it corrupt, or be heated more, and it causeth rather Colicks, Heart-pains, Vomitings and Cholerick fluxes by pulling the parts than Fevers, except by inflammation through pain there be a little fever which seldom follows these Diseases. And if it be so hot it cannot stay so long, to raise corrupt vapors and send them to the Heart to cause a fever: but this being moved and hot by a feverish heat brings forth accidents that signifie Choler as we shewed, of which the fever is rather the cause, than Choler the Cause of of the Fever; which being naturally mixed with the excrements and corrupting with them and sending stinking vapors doth not infect the superior parts.

They say that superfluous flegm in the Stomach, Guts, Mesentery and about the Bowels, corrupting causeth Agues called Quotidians, and if it be glassie or sharp, Epiala's. And some say that the corruption of wateriſh flegm causeth a gentle Fever in Dropsies called Leucophlegm and Cachecticks. But how can flegm which is cold, get so much heat from putrefaction that it may produce sharp and hot vapors, to cause Fevers, because if it be long kept, and the part be hot, it wil turn rather slimy than putrid. And no Authors mention any kind of putrid flegm, moreover these Fevers answer to the three humors excrementitious as they say *viz.* to Flegm, Choler, and Melancholy. And there is another cause of Epiala in which heat and cold are both at a time. As for the wateriſh flegm that brings a Fever we shal shew (treating of the serum) that serum is the cause thereof and not flegm.

For as Serum or Whey washeth the blood, and by its moisture allay's the heat and the Choler in the Blood, in the Jaundies: So when it is mixed in the Meseraicks with Cholerick blood putrified, in a great quantity it causeth lingring and long bastard Fevers. But this Whey being separated from the blood into the Abdomen that is Belly or Breast, or under the Skin, and there contained a long time corrupting, and turning, stinking, and sharp, as we have often seen it green and stinking, when it hath been let out in Dropsies: It causeth little Feavers, especially when it is near the Heart, being hot and thin, and corrupting the parts that contain it. Such Feavers are in Virgins that have the green sickness, saith *Fernelius*.

Fleshy moist Bodies, because they easily corrupt, and so have a preternatural heat, beget putrid Fever caused by the humors, which are out of their vessels whether they be Natural as parts of the Body, or contained in the Body as a dead Child, or Secundine, or preternatural, as Worms.

Corruption of some parts causeth gentle symptomatical Feavers.

Corruption of some parts of the body, causeth gentle putrid Fevers, if any part of the corruption or Vapor from it get to the heart. And these are of long continuance especially if there be corruption of any noble part or neer the Heart, by which means *viz.* the continuance of the Fever and corruption of the part, the body consumeth. This corruption begins from some humor fixed and stinking, corroding or infecting the part. Or from an Ulcer or Imposthume after Inflammation, or outward hurt, or a Vein broken: We shal shew the reason why this falling in some parts causeth Fevers, in others not.

In the Phthisis or Consumption the Lungs are usually ulcerated, corrupt, and filthy, and consumed for the most part, and the heart being constantly by their neerness infected, there is a gentle symptomatical Fever, which turns into an Hectick, which from the loss of a noble part makes the whol body lean and destroyeth it.

Corruption of the Liver and Spleen, by reason their substance is alike, cometh from the same causes in both, which we find often after Death with great stink; and it brings lingring symptomatical Fevers which produce Atrophy and Cachexy, and the vulgar take to be Hecticks, from the want of blood, most usual in Virgins and Children, such Children may have at the time of sucking and in the smal Pox when they refuse drink, and want moisture to cool them, the Liver growing hot, hard or swollen.

Corruption of the Reins causeth no constant Fever, because it goes away by Urin; neither doth the body pine away, for if one Kidney be consumed, the other wil officiate for it, & so a man may be long preserved.

The Brain and the Heart, being noble parts, cannot be corrupted to produce a Fever while a man is living. Though Ulcers have been observed in the Heart, which have caused Death, before a Fever.

Also corruption in the Membranous parts about the Stomach, Guts, Bladder, and Womb, the Mesentery and Cawl causeth a lingring Fever. Also in any part of the body inward or outward, and the farther from the Heart, the corruption is, the more uneven is the Fever and intermitting.

If the Child in the Womb with the Secundine joyned by the Vessels to the Womb be putrified, and continue til the Womb be infected, and other adjacent parts (as I have seen) there is a Fever of the same sort, which disturbeth the body after a divers manner and is long, if the Patient die not.

Corruption of preternatural bodies causeth lingring symptomatical Fevers.

Also preternatural things bred in the body, as Worms or Flesh joyn to other parts, corrupting and infecting other parts produce the same Fevers which shake and consume the body: but not except they corrupt; albeit Infants that have live Worms are feverish, and it is like a Synoch from an external cause, sharp not gentle, and as that hath other accidents, so in this Children have Worms.

A great heat with a malignant quality strikeing the Heart, gets constant malignant Fevers, and if it infect others, contagious; thus differing, as the heat comes only from malignity or corruption with malignity.

A malignant putrid heat causeth putrid malignant Fevers.

Corruption with a malignant quality, not only offending the Heart by it self as we shewed in putrid Fevers, but with malignity, causeth malignant, and contagious but not pestilential Fevers, these are in Infants in the Meazles and smal Pox, seldom in men: but in them it causeth common Epidemical Fevers without Bubo or Carbuncle, or great symptoms, but Head-ach and doting, which destroy. We shal shew how this corruption gets malignity and in what place, and what is the cause thereof.

The place in which this corruption is bred, is the same in which simple corruption is bred in the vessels of the hollow Vein, or in the Meseraicks, or without them; and it is as I shewed in the same humors and bodies.

Corruption of blood in the vessels that go to the Heart causeth putrid malignant continual Fevers and of divers sorts, from the same causes as other putrid Fevers are divers

If blood corrupt in the great vessels of the hollow Vein, and hath a venemous quality, which is communicated to the heart by the vessels as we shewed in putrid Fevers, disturbing it with stinking and malignant heat, it causeth

causeth continual Fevers, dangerous for two qualities. In which if Nature send any of that malignant blood into the pores of the Skin or the Membranes, it causeth Spots and Pimples smal Pox and Measles aforesaid, but if not, nothing breaks forth, but some small spots which declare the secret venom and Death. But then these Fevers differ in respect of the corruption and malignity which meet together.

The fevers that come from putrefaction of blood are like putrid Synochs and other continual Fevers, and as the blood corrupted was temperate or distempered, or is neer the Heart, or farther off, the symptoms are better or worse, and the whol course of the Disease varieth. Hence some of these are like Synochs, and have no strong Fits, as in Children of the small Pox; when Nature sends the filth forth, the Fever is milder. In malignant Fevers in men, if the Corruption be not great, and apear not in Urin or Blood, there is great heat, and accidents following. And if the Corruption increase, in an intemperate body neer the Heart or other princcipal part, then it begins with Horror and Heat as other continual Fevers and somtimes it is like a Causon or burning Fever in the symptomes.

From a malign quality joyned with Corruption, if it prevail and weaken the Heart, in regard Nature being hindered cannot valiantly and in order encounter the Disease, it happens these fevers whether less or greater or more hot, keep not a certain motion, nor time by which they are to be known. Yet somtimes they end with a Crisis. Those like Synochs putrid end not so, but by filth sent forth, as in the small Pox.

Choler in the Meseraicks, if it be malignant as wel as putrid, it produceth intermitting malignant Fevers, if it be green blew or black and venemous, Nature offended therewith, presently labors to expel it by fluxes or Vomits, and a malignant intermiting Fever is seldom seen, but if it come by the long reteining of that malignity, those Stools or Vomitings are deadly.

When humors corrupt out of the Vessels, in regard they can scarce produce simple Fevers; If malignity happen, it begets not putrid malignant Fevers but swounings, Convulsions, and other accidents; and if there be venom which of it self causeth Fevers without putrefaction, then it begets such Fevers which may come only from malignity, of which hereafter.

The cause of this malignant quality in the blood joyned to Corruption, from whence these putrid malignant Fevers arise, is either from things about us, or things taken in and retained.

Air or other bodies about us, if they be not only unclean but malignant, and we receive the malignity by breath or touching to infect the blood, then it produceth these Fevers, especially when the blood was foul before. When it comes from things about us, it comes from great changes, or exhalations.

Change of Seasons or inordinate great and sudden tempests, foreshewed by Meteors going afore or then appearing, or demonstrated rather than caused, cause these faults in the Air which produce these malignant epidemical Fevers like the Plague. Among these, is a wet spring with much Southerly Wind.

Exhalations stinking and venemous coming from the Earth, Ditches or Pools, and the excrements of living Creatures formerly infected, as swear, breath, bodies, pollute the Air to infect the body, and cause these Fevers, most common to them that live in the place from whence the seed of the infection sprang.

Corrupt Diet which not only fouls the blood, but is malignant, if it offend the blood caused by it both waies, makes not only simple but malignant Fevers, such as they have who have been in a Famine, as the Greek Proverb is, *After a Famine comes a Plague.*

Corrupt blood long retained in the body, as when it is sent out of the Veins into some part, and turns venemous, causeth such symptoms as they have who are stung with venemous Beasts. Also Blood corrupted in the Veins and growing old where it cannot produce a Fever and malignant, causeth not only putrid Fevers, but malignant and spotted Fevers; these are in some men of impure constitutions when there is no epidemical Fever, that have been il disposed a long time before. This malignity is known by the sudden failing of strength, spots and other signs of secret poyson. Also Infants though Nature presently casts forth the venom have such Fevers from the same cause, by which they cast off the filth of blood they brought with them, and after they renew their bodies by Scabs, and Itch, and other natural purgations. This came not only from the Mothers Courses as they suppose, because the Child is not nourished in the Womb with impure but good blood, and the excrements gathered to the time of bringing forth, after the Child is born are sent forth by stool not only red and green, but black. But there may be new corruption and venom from change of Diet.

A malignant heat is the only cause of malignant Fevers.

A malignant quality alone, and without corruption may cause a Fever pestilential and venemous. This quality is seldom seen in the body, but a Corruption went afore it to which it is joyned, such as hath power to strike the Heart as soon as it is taken, and to infect it and the whol body, spirits, humors and parts, getting Fevers like Ephemera's or Synochs, with great weakness alone, or joyned with other Diseases. But these Fevers differ in respect of the Poyson taken in. For there are divers sorts of Poysons which strike at divers parts of the body, and afflict the Heart, and some inflame it and cause Fevers, and indeed we cannot declare what this propriety is, but we know by the effect that it doth so. We shal therefore make two kinds of poysons which cause Fevers from the diversity of the effects which they produce. The one we wil call manifest inflaming poyson, the other secret pestilent poyson.

Inflaming poyson is the cause of malignant venemous Fevers.

We conclude that there is an inflaming Poyson from stinging and biting of venemous Beasts which causeth venemous Fevers, from inflammation of the whol body, great Thirst, Horror and Shivering, as *Nicander* and *Dioscorides* describe it. *Nicander* that the biting of the Serpent Dipsas inflames the Heart. These Fevers are proper to them that are so stung, and have the aforesaid and other accidents. In which if any part of the Venom be sent forth by nature to the extream parts, there are blew spots in the Skin. And sometimes there are Bubo's as in the Plague, as *Nicander* saith, when they are stung with the Serpent *Cerastia*, and have great pain in both Groyns; somtimes where the sting is and the poyson entred, there is a Pustle or Inflammation which shews the way by which the Poyson entered.

Pestilent Poyson causeth Malignant Pestilent Feavers.

A Pestilent Poyson of what kind soever causeth a Pestilent Feaver: for there is seldom a Plague, without a Feaver, though in some it is discovered only by the Pulse, this is deadly and contagious or the cause of Popular infection. It is manifest that this Pestilent poyson comes first to the Body from without, because it strikes a Man suddealy. But when it invadeth pri-

vately we know not the place whence it came, being internal, except we ſuſpect ſome body that was infected, and near the Patient. Some ſay this Venom is in the Air, and gets into the Bodies therewith, either ſent from Heaven into it, or by change or exhalations, it is ſo corrupted, that it hath not only malignity to cauſe putrid, malignant Feavers, but alſo Peſtilence. But omitting many other Arguments: We ſhall conclude it not ſo from hence. That after great and long tempeſts, though there be other Diſeaſes, there is often no Plague, eſpecially where the Contagion of dead Bodies is avoided. And the Plague is many times, when no change of times, or Stars went afore, or is preſent, as in the year 1564. in that great Plague in *Germany* no man could accuſe the Air of Intemperance. But chiefly, if the Plague ſhould ariſe from a poyſoned Air, every Man that breaths therein, ſhould be infected, becauſe it is the Nature of Poyſons, that being contrary to us in their whole ſubſtance, they ſeaſe upon Bodies howſoever they are diſpoſed. This coming to paſs, that the Plague taking but here and there ſome that are in the ſame Air, we cannot conclude that it is in the Air and ſo communicated to Mankind. But it is more probable, that as other Poyſons are bred in ſome Bodies, from the beginning of the World, ſo this peſtilent poyſon is not only in ſome bodies infected, and others not feaveriſh as yet, but in their Cloaths, and ſo paſſeth from body to body, not only by touching but by the Air intervening; This Peſtilent Poyſon, taken by breathing in, preſently ſtrikes the Heart, and makes a Feaver in a moment; Or getting into ſome part of the Body, gets by degrees into the Heart by ſecret paſſages: Or ſtaying there ſomtimes infects the Body but not with a Peſtilent Feaver. But by this the ſame body or another may be infected ſooner or later.

Hence it is that ſome infected perſons flying from the place infected to another, where there is no infection, and there ſtaying, have the Plague after many daies, or infect others before they are themſelves infected therewith. As we know by experience, and *Fernelius* witneſſeth, that a Harlot that hath laien with a man that hath the Pox, hath not been infected herſelf, and yet hath given the Pox to another, And therefore we dare affirm that this Seminary Plague, lodgeth alwaies in ſome part of the world (as other Poyſons do) in ſome bodies and from thence goes into others, by the way we ſhewed. As we know the Pox doth, which came firſt from the *Indies*, and ſo crep from body to body to us, and is no where but in mens bodies. And it ſomtimes appears not in ſome places, and ſomtimes it doth, and is carried by men from one Country to another. So the Plague although it hath long been unſeen in ſome places, yet being in ſome bodies upon the Earth, it is derived in time into others, ſo that it is not neceſſary when we hear no news of it, to think it is taken out of the World, or that it is newly begot in the Air, when it returns. Although we deny not but that the Air may be infected, and may get into the body, as in Putrid Malignant Feavers was ſhewed: As the Plague may come from infected bodies by the Air, but that it took the beginning from the Air, we cannot allow for the reaſons mentioned. All which as they are probably to be found in the ſeat and original of this peſtilent Venom, ſo it is very difficult to explain how this poyſon goes from body to body, and why it infects one rather than another in the ſame place, in regard this is not done ſo plainly as in other poyſons but ſecretly: But it is eaſier to ſhew, why Fevers differing in nature, accidents and ſigns ſhould come from thence. All theſe happen either in reſpect of the Venom, or the diſpotion of the ſubject body ſo infected, or in reſpect of ſtrength.

The contrary effects which cannot come only from the conſtitution of the body affected ſhew that Peſtilent venome, is not all of the ſame nature: for ſome Plagues take all or moſt with one diſtinction, others only few; others kill all they touch: others are moſt of them cured. But we cannot deſcribe what lieth hid in the venome that cauſeth the variety and whence it comes.

To find out a fit diſpoſition of Body, or of the Heart, as *Fernelius* ſaith, to receive this poyſon is as impoſſible as to ſhew the nature of it: becauſe men of all conſtitutions, and thoſe that are not only foul bodied, but pure and ſound are eaſily infected: ſo that no diſpoſition is required, or if any, it is difficult or impoſſible to be known, as *Fernelius* ſaith and we confeſs. And therefore in the former caſe and this, we fly to divine providence, which ſtirreth up this Plague here or there for the puniſhment of man, and ſends it to what place he pleaſeth, to kill thoſe he marked out, and to chaſtiſe others. Yet though we can no otherwiſe deſcribe this diſpoſition which makes men fit or unfit for the Plague, in regard the Peſtilent Feaver is not one and the ſame that comes from the venom, we can prove that it comes from the diverſity of the ſubject body that is affected. As fire burnes more or leſs according to the variety of the fuel, ſo when the Plague is in any body, it hath a different Feaver in reſpect of the different conſtitution.

If it gets into a temperate body (for it ſpares not ſuch as Children, Virgins, Youths and well habited bodies) it cauſeth ſomtimes a mild Feaver like a Diary, only the ſpirits being inflamed with the Heart, and then the heat and the accidents following are milder, nor is the Urin changed much.

If the Plague ſtrike a Sanguine or Plethorick perſon then it will be like a Synoch Feaver and the Spirits and Blood will be inflamed with the Heart: in which there is greater heat, and accidents as Head-ach, redneſs of Face and the like, that diſturbe the Patient grievouſly.

If the Plague ſeize upon Cholerick perſons, then by reaſon of the heat of the Heart, Spirits and Humors, there is with other Symptoms of heat, Vomiting, Stools, and other accidents from choller which are grievous.

Unclean bodies, eſpecially that have corrupt blood, and ſubject to Feavers, if they take the Plague, then it is putrid continual and Malignant with great heat and other Symptoms, and then are foul excretions by reaſon of corruption.

The reaſon why they who have the Plague are in more or leſs danger, is in the ſtrength as well as the poyſon, for ſtrong perſons oppoſe it more then weak. And this is the reaſon why ſome have ſpots and others none: for if nature be weak the poyſon will lie at the Heart and no tokens thereof appear. But if nature ſend it forth, then it inflameth every part it toucheth and burns it red, with pain and impreſſion under the Arm-pits, or Tumors under the Ears, or Carbuncles, which inflamed increaſe the Feaver. And when nature disburdens her ſelf by the pores of the Skin, there are Spots and Puſtles: Theſe are cauſed by the Poyſon ſent out by Nature: And are not ſent as markes or tokens, as ſome call them, of the Plague, at its firſt entrance: for though ſome appear at the firſt, Nature doth cauſe it by expelling from the Heart that which ſo ſuddenly ſmore it: except a Puſtle come by touching of a dead body infected, as I once had in my hand, but when

when I felt the pulſe of a man in a mortal ſwear, that died of the Plague; and both I and my Chirurgion that was with me had a puſtle in our Feet which ſuddenly vaniſhed and though we were infected we had neither Feaver nor any other inconvenience. And in the year 1634. I touched the pulſe of a ſweating man dying of the Plague, and preſently after I had black ſpots from my middle Finger and the outſide of my Hand to my Wriſt; yet they preſently went away after I had waſhed my Hands with Vinegar and Treacle. And Bubo's come in the Plague ſomtimes, not from the poyſon ſent to the Emunctuaries, but from the heat and pain of ſome Carbuncle that is near, as in other Inflamations: Yet ſomtimes they come from both cauſes, and there are divers in the ſame, or divers places, and theſe being inflamed and brought to ſuppuration joyn a new Feaver to the former. I have by long obſervation found out theſe things, having ſix times been a practiſer in the time of great plagues to the end of them, and been conſtant to my patients, and therefore I declare them for Favor of no man, but for Love of the truth.'

Heat fixed in the Body, is the cauſe of Hectickes.

A fixed conſtant heat in the Heart and other parts, not mutable or that called fire by the Greeks, which comes and goes without change of temperament, (the parts that were hot returning to their former ſtate) as *Fernelius* ſhews may be in the ninth Chapter of his Book of temperaments. But when the temperament and proportion of the Elements to uſe the words of *Fernelius* are turnd hotter and dryer, ſo that the heat can ſcarſe be removed or the temperament changed, then Feavers will be continuing long and conſtant, never to be cured. Hence they are called Hecticks, becauſe they are in the habit of the body, called in Greek ἕξις and cannot be eaſily removed, as habit is not eaſily taken away; And in regard the heat in them is not fiery, as in other Feavers, but a change of the temperament into more hot and dry, as I ſhewed: therefore they ſcarce feel the heat, although all ſimilar parts of the Body are changed and dryer and hotter to the touch, and the Heart is perceived to beat quicker and harder. This heat is not alwaies alike, but when the body is more inflamed, as after meat, which they alwaies perceive, or violent motion and other cauſes; it is increaſed with the pulſe and motion of the Heart. Alſo the Conſumption called Maraſmus which follows theſe Feavers, is not the melting of the body by violent heat, by which means they ſay ſome pieces of the body come away by Urin, but falſly, for that is only from the foulneſs of the Reins and Bladder, and otherwiſe in the moſt burning Feaver the parts cannot be ſo roaſted and melted. But this leanneſs comes from the temperament of the ſimilary parts turned hotter and dryer by reaſon of the heat of the Heart. And this is the reaſon why they are not rightly nouriſhed, but fall and pine away in a Conſumption.

Another Feaver going before it, is the cauſe of an Hectick, becauſe the heart cannot looſe its temperament ſo much from any other cauſe then the heat of a violent Feaver, which by its ſtrength and continuance may at length change the Heart. Hence it is that theſe Feavers come ſeldom from a ſimple and pure heat and Diary Feavers. But if they end not in an exact time as they uſe to do, and turn not into putride, they turn into Hetticks. But more uſually they come from putrid Feavers alone or Malignant, which laſt long, eſpecially when the Heart hath been long ſcorched, and after quenched and then Diſtemper remain, which cauſeth a long Hectick which conſumeth the Body, when the burning Fever is gone. This is not that Fever which while the burning Fever remaineth, ſo broyleth the Heart by its violent heat, that the whole body is ſuddenly conſumed which is called, A melting Hectick. Alſo Hecticks may be produced from long intermitting burning Fevers after the ſame manner. And *Fontanonus* teacheth, that they may come of continual Fevers when a ſemi-tertian abides long. Alſo from other putrid Fevers though gentle, if long, and heat the Heart conſtantly, may a gentle Hectick follow gentle and lingring putrid Fevers, as in Cachecticks and Conſumptions, becauſe the Cauſe is more neer the Heart. Alſo they begin and are joyned with Putrid Continual Fevers which are known as we ſhewed, by the accidents of the aforeſaid Fevers ſtil continuing, and a greater Conſumption then was in Putrid fevers; As when an Hectick is joyned with an acute Putrid, Lingring, or Intermitting; This is cauſed by the diſpoſition of the Heart, if it be by nature too hot which grows ſooner hot and dry by the fevers aforeſaid. And by a Heart that is tender and quickly receives other heat which deſtroies the Natural. For this cauſe yong Children have often Hecticks, not only after a long but a Diary fever.

The Cure.

The general Cure of all Fevers the Indication being taken from the Diſeaſe is moiſtening and cooling becauſe they are hot and dry. But becauſe the heat is not alwaies the ſame in every kind of Fever, and the cauſes divers, the Cure muſt be divers. The chief kinds are ſolitary or alone Fevers without another Diſeaſe, and theſe are ſimple or compound; or accompanied with another Diſeaſe. The Cure differs according to the Cauſe of theſe three kinds of Fevers.

They are ſimple ſolitary Fevers which are of one kind, under which are divers ſorts in reſpect of the divers Cauſes, for which the Cure is different. When they come from a ſimple or ſingle heat, they are pure and ſingle called Ephemeral and Synochs; when from a putrid heat, they are Putrid, Continual, and Intermitting: When from a malignant heat, they are Putrid, Malignant, Peſtilential and Venemous. When from a fixed heat, they are Hecticks. To theſe eight kinds we ſhal preſcribe particular Cures.

The Cure of an Ephemeral Fever.

An Ephemeral Fever Pure, Single or Alone, ends of it ſelf many times the firſt day before twenty four hours paſs, and brings no danger. If it continue longer by ſome error or greatneſs of the Cauſe, it turns to a Synoch, ſeldom to a Hectick: To prevent which they muſt be thus ordered by Altering and Evacuating means.

For the Evacuation of the matter which is thin, and and ſooty, and diſſolves and breaks forth by heat increaſed, by the pores inſenſibly or Sweat, we ſhal help Nature thoſe waies, for ſhee wil of her ſelf do it, if ſhee be not hindred.

By keeping the body warm, leſt the Vapor be ſtruk in.

By giving no meat before the Fever decline leſt we hinder Natures motion, or very little and that when the body is weak.

By giving to drink ſometimes ſuch things as help tranſpiration or ſweat as we ſhal ſhew in the Synochs accompanied.

If the Belly be looſe there is leſs danger of its turning

ing into a Synoch, this is better done by Clysters and Suppositories than by other means.

If the Fever come from a Surfet, or Wine especially, a Vomit wil not be amiss.

Altering things, in regard the heat is small, are not many. If the Air be too hot in the Chamber, it must not be too much cooled but qualified, lest we increase the Fever by sudden sending the heat to the Heart, or by stopping transpiration or sweating. And we refresh them with moderate drinking, if they thirst, by which they wil sweat better.

The Cure of a Synoch not putrid.

A simple pure Synoch if it be alone, although the heat be great, if it be wel ordered departs the third or fourth day at the farthest without hurt either by transpiration or Swear. If not, it turns to a Putrid or a Hectick. But usually when some blood gets out of the Veins, it produceth Eryspelas, Bubo, or inward Inflammations, as we shal shew in treating of Synoch accompanied.

To prevent these betimes while the the Fever is solitary, especially lest Inflammations should arise which are very dangerous, we study speedily to quench the blood, and keep it from going out of the Veins, and discuss whatsoever is turned into Vapors, and to correct the greatest accidents, By the things following, observing the constitution whether it be sanguine or cholerick.

Blood-letting is the first thing to cool that Inflammation, and to draw it from falling into noble parts, and causing dangerous Inflammations (*Fontanonus* therefore saith it must be done quickly, and by so saying, he affirms my Opinion that these Inflammations go not before but follow a Synoch) Therefore in plethorick persons it must be done speedily, if it were omitted the first day expecting an Ephemera, the next, because the Fever remaining concludes it to be a Synoch. And a general Vein opened, and a great quantity taken away, even to swounding in strong plethorick persons, as *Galen* saith. Or which is safest it must be done often. In cholerick and yong persons it must be used sparingly, if there be danger of Inflammation I fear not to open a Vein in a Child of ten yeers old.

Purging is to no purpose, because it takes away none of the Cause, and only inflames the body. But before blood-letting it is good to loose the Belly, By a Clyster is the quickest way, and it also cooleth. Thus, Take *of the four emollient Herbs, each one handful*; *Lettice half a handful, Barly a pugil*, boyl them, add *Cassia one ounce, or juyce of Beets and Lettice each half an ounce*; *Honey, Butter, each an ounce*; with a little *Salt* make a *Clyster*. And this may be given again after bleeding if the body be bound.

Or give two ounces of Syrup of Violets or Roses with water, or simple Diaprunes, or other gentle Electuaries, by which the Cacochymie or evil juyce is diminished. If Nature be accustomed to it, and tend that way, a Vomit may be allowed, especially if the Fever come from a Surfet of Wine, or Eating, or the like. And if Choler be hot and troublesome in the Stomach it will help much.

We give also things to quench the heat of the blood, or allay it; and to thicken it that it may not get out of the Veins easily, these are actually or potentially cold; and such as keep away putrefaction, which blood inflamed is easily turn'd into, to prevent a Putrid Synoch. They are sharp, or sour things which do both cool and hinder Putrefaction, and are excellent when Choler is much inflamed. Also they take away the bitterness of the Mouth and Thirst. These are in divers formes.

Drinking of cold water is good to allay the heat of Blood. This done in abundance to satiety, and blood-letting till they faint, was accounted sufficient for the Cure. But custom and constitution must regulate the quantity of these.

Crude or boyled Water, with Barley, a little Vinegar, or Juyce of Pomegranates, Lemmons, or the like, to sharpen it, is good to be given instead of Drink.

Also distilled Waters of Purslane, and Sorrel, with the Decoction of Barley, or the Decoction of Lentiles which is best when an Erysipelas appears to send the matter forth.

Also Juleps of Syrup of Currants, Pomegranats, Lemmons, Sorrel, Citrons or Jujubes, are good mixed with Waters to thicken the blood, as those usual of Roses, Violets, Maidenhair.

If the Belly be bound Thus. Take *Syrup or Julep of Violets* (the one is made of the *Juyce*, the other of the *Water* of Violets) *each one ounce and an half*; *Syrup of Ribes or Currans one ounce, Barley water six ounces, Bugloss and Sorrel water, each two ounces*; make a *Julep*, with a little *Cinnamon* or *Galangal* to sweeten it.

If the Belly be too loose. Take *the Alexandrine Julep or Julep of Roses* (which by reason of the Rose water astringeth, the Syrup looseen) *two ounces, the Decoction of Barley four ounces*, drink often.

You may give a spoonful or two of the syrups aforesaid. *Salts, Spirit*

Put Oyl of Vitriol some drops in Water to make it sharp for a Julep. And the Chymists commend in these fevers the Spirit of Niter, and the Salt called *Lapis Prunella* or Crystal Mineral in cold or distilled water in a good quantity.

You may give Conserves thus. Take *Conserve of Roses one ounce, Conserve of Sorrel and Barberries, each half an ounce*; *Candied Citron peels half an ounce*, with *Syrup of Barberries*.

Or thus. Take *Conserve of Roses, Sorrel, Barberries,* (if the Belly be loose) *each two drams*; *Coral one dram, red Sanders half a dram*, with *Sugar of Roses*, make a *Conserve*.

We alter by external Remedies to the Heart, Liver, and Reins that are cold, by consent of which parts all the body is cooled.

To the Heart with this Epithem. Take *Rose water three ounces, Bugloss and Burrage water each two ounces, Vinegar of Roses half an ounce, Juyce of sour Apples and Lemmons, each two drams*; *red Sanders a dram*.

To the Liver with this. Take *Endive and Sorrel water, each three ounces*; *Vinegar of Roses half an ounce, Spikenard a scruple*, mix them.

We anoynt the Reins with *Galens* white Cerote or Ointment of Sanders.

It is good to bath in sweet water in the declining of the fever to refresh and to discuss the Reliques, if after you anoynt with Oyl the whol body or Backbone.

Friction or Rubbing is also good in the declining of a fever to dissolve the Vapors raised from the hot blood, if it be gentle with a hot Cloth, and anoynt the body with Oyl of Chamæmel.

Sleep Refresheth, takes away Thirst, and provokes Sweat.

For correcting the accidents, let the Diet be thin and nourishing to sustain strength, as Barley-Cream, Ptisans, Almond milk, boyled fruits, with other Cordials to restore the Patient.

Let Head-ach, Watching, Doting, Thirst, Driness, of

of Mouth, Roughneſs of Tongue be amended as we ſhewed how. But if the the former things be rightly adminiſtred they ceaſe of themſelves.

The Cure of Conſtant putrid Fevers.

A Continual ſolitary fever though it hath divers kinds as a Continual Tertian, Quotidian, Quartan, and that called inordinate which is moſt uſual, and a putrid Synoch and Cauſon, yet becauſe their Cauſe is the ſame, that is blood corrupted in the Veins, though the ſpecies or kinds are different in reſpect of the place and blood we ſhal ſpeak of the Cure of them altogether becauſe moſt if not all the Remedies may be applied in part to every one.

As for the Prediction, in regard *Hippocrates* ſaith the Judgment of acute Diſeaſes, meaning Fevers is uncertain, we muſt not raſhly pronounce Health or Death. But we may declare danger or good hope by obſerving ſigns and accidents and chiefly the Critical daies, and among them thoſe called Indices or declaring daies, to foretel what will be (from the ſigns) in thoſe daies following good or bad, from whence as the Ancients did, ſo can we with warineſs pronounce ſomthing, all things diligently conſidered: for if the Criſis ought to tend to the beſt, which leads to health, upon the directory day good muſt happen, which is the ſeventh of the firſt week, & the fourteenth of the ſecond, and the twentieth not one and twentieth of the third. And after in the ſame order the twenty ſeventh, thirty fourth and fortieth. Theſe are indicated by the fourth the eleventh, and ſeventeenth and the reſt, alwaies going before them three daies, and therfore are called Indices. If the Criſis or Judgment ought to be for the worſt, which brings Death, the Directory fals upon an evil day, which is the ſixth or eighth or tenth or twelfth: that is an uncertain Criſis in which the fever abates not at all, and therefore called Imperfect and doubtful, tending to good or evil at its return. This is often the third, fifth, or ninth day. But the Prognoſtick ſigns and accidents by which we judg of the event of fevers are theſe chiefly that follow.

The Urin is to be obſerved all the courſe of the fever, becauſe the matter is the Veins, and therefore it is much changed. If it be Saffron-like, or high as Gold, it ſhews heat, or purging of Choler by Urin. Black ſhews greater heat and danger, except the melancholick humor ſent forth by a critical evacuation cauſe it. If it be thin, of what color ſoever, or crude it is worſe than thick, if it be perſpicuous or to be ſeen through, whether thin or thick it is good, becauſe it is neer to the natural. Troubled Urin portends no ill, if it come ſo from the cold Air external, becauſe that which is concocted is uſually ſo; if it be piſſed ſo it is evil, except it be critical or a natural diſcharge; a ſediment in the Urin is good if it ſtay at the bottom, and together not diſperſed equal, white, and thickiſh eſpecially in a critical day. That Urin which is otherwiſe is worſe.

The pulſe doth declare chiefly the heat and ſtrength, which the oftener and quicker it beats, eſpecially in the Diaſtole or dilatation ſhews greater Heat: And as it is ſmall or great declareth the ſtrength. An unequal, intermitting, creeping Pulſe ſignifies no good.

Difficult Breathing ſmall and ſtrained is not good.

Sweat which the Patient liketh, and wetteth the whol body, and is hot, is good. If it ſtink and come in due time, it is not hurtful. Cold ſweat is ill and a forerunner of Death.

Much Piſſing is good, and in a good Critical day takes away the Fever.

Bleeding at the Noſe and Courſes coming unſeaſonably do not eaſe, but coming critically cures the fever.

A Looſneſs, or Diarthæa following, except it help to take away ſome of the cauſe, weakneth and is dangerous. And black ſtools ſhew malignity.

If the ſharpneſs of the fever be conſtant and the body burning continually, or if it be dayly, or twice or thrice in fevers called inordinate and quotidians, it is dangerous.

Toſſing of the body, reſtleſsneſs, caſting off cloaths, and going to the feet, as *Hippocrates* ſaith ſhews the greatneſs of the fever and loſs of ſtrength. If Sleep cauſe trouble it is an ill ſign according to *Hippocrates*. When the Temples fall, the Noſtriis are ſharp, the Tongue dry and black, the outward parts cold, they are evil ſigns. And a ſudden conſumption of the body ſpoken of in a melting Cauſon.

Long and often Swounding, Hiccupping, Sighing continuing, Convulſion and Carus are perverſe and deadly accidents.

The Cure of continual putrid Fevers.

Though Nature cures continual putrid fevers, which only doth it ſomtimes, yet by the help of a Phyſitian ſhee doth it better and ſooner. If any part of the cauſe which maketh it, or increaſeth it, be evacuated, and the heat altered, and the ſtrength be preſerved to the ſtate and criſis: Let us take away ſymptoms, if they remain, and be violent which is done by divers means.

Things that Evacuate the Cauſe which produced, nouriſheth and increaſeth fevers, comprehend by blood-letting, evacuation of *Humors* and *Excrements* by ſtool Urin and Swear.

Bloodletting (except hindered by fear of Swounding and weakneſs, which appears in a ſwounding fever by the moving of the Choler in a Diarrhæa) is the the chiefeſt means to abate the Cauſe and the Accident.

It wil take away the cauſe, to open any apparent Vein the Arm. This is a principal Remedy, becauſe the Cauſe lurketh in the Blood, and in the branches of the hollow Vein from whence the blood is drawn: for with the blood ſome corruption is taken away, as we may plainly ſee at the firſt bleeding, for nature throws ſome of the cauſe of the Fever into the great Veins in the skin, which makes them ſwel where it is moſt: and perceiving this at the firſt opening of the Vein, I ever thought it beſt to open the Vein which ſwelled rather than another, becauſe they all come in one place from the hollow Vein againſt the Throat, and the Chirurgeons may uſe this obſervation rather than thoſe of the the ſigns in Heaven. Alſo hereby is the Heat abated.

The time for bleeding is the beginning of the fever, to hinder the increaſe of the Diſeaſes, and to take away ſome of the Cauſe while there is ſtrength. And if it be neglected at firſt, it may be done in the increaſe. But in the ſtate and heigth, which is ſomtime ſooner or later, we muſt avoid it leſt we hinder the motion of Nature: For as *Hippocrates* ſaith, if any thing be to move, let it be moved in the beginning, but when the Diſeaſe is at a ſtand, be quiet.

The quantity of blood muſt be taken according to the cauſe and the Diſeaſe. As for the Cauſe, if the blood be foul let it run, if not, ſtop it ſooner. And if the foulneſs was not ſeen when it ran forth being hot, as it appears when cold and congealed, at it again if need require, and again if there be no hinderance and the ſtrength permits. In reſpect of the Diſeaſe meaſure

the blood alſo: in a putrid Synoch, or in a ſimple, which is in a Plethorick body looſe much blood, And in a Cauſon or burning Feaver, by reaſon of great heat although they condemne it, who ſuppoſe it to come from pure choller which we deny. In other Feavers as the heat is more or leſs, bleed more or leſs obſerving the conſtitution and ſtrength.

The accidents removed by bleeding, are Head-ach and Doting, which are uſual in theſe Feavers, and the vulgar obſerve moſt. In which, becauſe the matter is carried to the Head after a general Blood-letting, bleed at the Feet, and ſcarifie in the extream parts, to make revulſion. And to derive the matter, open the Vein of the Fore-head, eſpecially in a Delirium or under the Tongue, eſpecially when you fear Inflammation in the Neck, Jawes or Tongue: Alſo Scarification is good in the Neck and Shoulders.

Somtimes we purge the Humors and Excrements to prepare and remove the cauſe that nouriſheth increaſeth and alſo produced the Feaver.

The cauſe may be the retention of Excrements in the Guts and Stomack.

Theſe may two waies hurt, firſt if they be many the Veins being empty by bleeding, take filth from the Meſeraicks which they drew from the Guts. Therefore before blood-letting we looſen the Belly: Secondly, if we will purge humors, and the Excrements of the Belly be not firſt cleanſed, nor the body as *Hippocrates* ſaith made fluid, the Medicine will be hindered by them and take leſs of the reſt away. And therefore we give Laxatives afore purges. But thirdly and chiefly, in regard there are divers putrid and chollerick Excrements in the Belly, if they be long kept, by their ſtinking vapors they will increaſe the heat of the Heart or the parts near, which they can reach unto (for as we ſhew'd they cannot come to the Heart) and ſo make the Feaver and its Symptoms, eſpecialy thirſt and Head-ach greater. Therefore it is good to prevent coſtiveneſs all the time of the Diſeaſe with giving Laxatives: Such as may cleanſe and not inflame; temperate and moiſt and cooling. In theſe following forms.

Clyſters work ſooneſt, and are beſt, and therefore we give them before bleeding, which muſt not be delayed. Theſe by moiſture waſh the Guts, and provoke not, nor inflame, as things given at the Mouth, and they bind not after, as uſually they do. And they may be given the whol time of the diſeaſe, if there be coſtiveneſs by reaſon of heat, when we dare not ſtir up nature with other things, as in the ſtate of the Diſeaſe.

Make an eaſie looſning moiſtning, cleanſing cooling Clyſters thus: Take *Barley and Bran, each a pugil; Mallows, Violets, each two handfuls; Houſleek three or four leaves*: boyl them, and in a pint diſſolve *Honey two ſpoonfuls, Salt butter three ſpoonfuls, juyce of Beets one ounce*: Make a Clyſter.

The following is more pricking and cleanſing. Take *the four Emollients, Blites, Spinach, Beets, Cole, Lettice, each an handful; Marſh-mallow roots one ounce, Pellitory and Mercury, each half an handful; Prunes ten, Linſeed half an ounce, Gourd ſeeds half an ounce bruiſed*: inſtead of *Cold ſeed*, which are uſually muſty, boyl them and in a pint diſſolve *red Sugar and Honey, each one ounce*; theſe cleanſe and reſiſt corruption, *Oyl of Violets three ounces, two yolkes of Egs, Caſſia or Diaprunis ſimple one ounce, Turpentine of the larke Tree*, diſſolved with the *yolk of an Egg two drams*, this is moſt pricking, with a little *Salt*: Make a Clyſter.

When you will cool more, as in a Cauſon: Take *the Emollients Lettice, Purſlane, Houſleek and Endive, each one handful; flowers of Violets, Water-lillies and Barley, each a pugil; Gourd ſeeds half an ounce, Melon ſeeds two drams, ſweet Prunes ten*; boyl them and in a pint diſſolve *red Sugar one ounce, Honey of Violets one ounce and an half, Caſſia half an ounce, juyce of Lettice an ounce*, with a little Salt make a Clyſter.

If the party be flegmatick or old and the Feaver not violent, ſuch as they called a Quotidian continual, then chooſe more temperate things, and mix gently hot things and more abſtergents or clenſers: Thus, Take *Mallows, Pellitory, Mercury Beets, each one handful; Barley and Bran a pugil, Rayſons and Figs, each twelve pair; Fennel and Carua ſeed, each one dram and an half; Cordial and Chamomil flowers, each a pugil*: boyl them and in a pint diſſolve *Honey of Roſes and red Sugar, each two ounces, juyce of Beets or Mercury one ounce, Oyl of Chamomil and Violets, each an ounce and an half, with a little Salt*, make a Clyſter.

Suppoſitories may be inſtead of Clyſters if they cannot be given, theſe will provoke nature to thruſt out the Excrements: the common is that of Honey and Salt; or that of Figs or yolks of Egs and Salt, or a Sugar Violet comfit for Children.

Things are given to looſen before bleeding and purging. Thus,

In a Bolus: As, Take *Caſſia new drawn, pulp of Tamarinds, each half an ounce; with Sugar or without it*: make a Bolus.

Or: Take *Diacatholicon, Diaprunes ſimple, each three drams; with Sugar*: make a Bolus.

In a Potion: Thus, for the Delicate ladies; Take *Manna one ounce and an half*: give it in Peaſe broath.

Or: Take *Damask Prunes ten, Rayſons ſtoned half an ounce, Dates four, Cordial flowers one pugil, Gourd ſeeds half an ounce, Melon ſeeds bruiſed two drams*: make a Decoction, diſſolve *Caſſia, Syrup of Roſes ſolutive, each half an ounce*: make a potion.

In hot and cholerick perſons: Thus, Take *Syrup of Roſes ſolutive and Violets, each one ounce; Caſſia new drawn one ounce*; give it.

Theſe may be repeated if the Belly be bound at any time.

Or this which I uſe: Take *Syrup of Roſes ſolutive and of Violets, each three ounces*, give it in boyled water like a Julep for conſtant drink: abſtaine from it, if by rumbling of the Belly, or the like ſigns, you fear a Flux.

If crude Humors are in the Stomack, uſe the ſame gentle Medicines, eſpecially becauſe then there is inclination to Vomit, and if Choller, great thirſt and bitterneſs of taſt, and nature muſt be helped to caſt out her enemy: by tickling the Throat, or with gentle Vomits which looſen and cleanſe and cool.

As this: Take *a draught of warm Water, and a little Vinegar*.

Or, Take *warm Water or fat broath, with ſyrup of Vinegar or Oxymel one ounce and an half, common Oyl one ounce*.

Although bleeding takes away the filth which is the conjunct cauſe of a Feaver, the beſt, yet becauſe that Evacuation may be made from the Veins thereby we may provoke ſtools, Urin and ſweat alſo.

We uſe purges to cleanſe the Guts and Stomack and alſo the firſt Veins which cauſeth corruption in the other: for nature by them provoked draws preternatural Excrements from the ſecreteſt places to the ſink. Therefore after Laxatives and the next after bleeding when the diſeaſe is urgent and the matter turgent, and needs no more preparation, we give purges: Somtimes after the Feaver hath been ſome time, after a prepa-

preparative: But we aovid ſtrong purges that are hot, or we qualifie them that they ſtir not the Body too violently nor enflame. And though practitioners uſe not divers purging Medicines in intermitting and continual Feavers, yet becauſe in the well daies when the feaver is abſent we may uſe ſtronger then in a continual Feaver. And we muſt alter the purges according to the nature of the Feaver, and moderate them in continual Feavers.

In a Cauſon called a burning Feaver, they muſt not be hot but qualified. As: Take *damask Prunes ten, Raiſons ſtoned one ounce, Sebeſtens twelve, Tamarinds one ounce, Dates four, Cordial flowers, each a pugil: the great Cold ſeeds, each an ounce, of the leſſer Cold ſeeds, each half a dram*: boyl them, add if you pleaſe *Endive and Lettice water to abate heat*, and diſſolve *Manna* (which they ſay being thus mixed turns not ſo ſoon into Choller) *Caſſia each half an ounce*; (this ſomwhat ſharp like Tamarinds and therefore excellent) *ſyrup of Violets one ounce, or of Roſes and Violets, each half an ounce*: make a Potion.

Or thus ſtronger: Take *Caſſia newly drawn and Tamarinds pulped, each half an ounce*; *Electuary of juyce of Roſes two drams*; make a Bolus: or diſſolve it in broath or Barley water.

Or: Take *Diaprunis and Electuary of the juyce of Roſes, each one dram and an half*; *ſyrup of Violets one ounce, with Barley or Endive*: make a Potion.

After theſe Scammoniate Medicines, give *an ounce and an half, of ſyrup of Violets with Endive water* to qualifie them, or after the purging to hinder the increaſe of heat.

Some deny Rhubarb becauſe of its binding but that is not to be feared, if it be infuſed.

Take *Syrup of Violets one ounce and an half, of Roſes ſolutive one ounce, Rhubarb infuſed in Endive water and ſtrained half a dram*: make a Potion.

Or thus: Take *Rhubarb four ſcruples, Spicknard one ſcruple*, infuſe them in *Endive water and Whey*, diſſolve therein *Manna one ounce, Caſſia ſix drams, ſyrup of Violets one ounce*: make a Potion.

In a putrid Synoch and a ſanguine Conſtitution uſe the ſame. Or this: Take *Rhubarb*, infuſed in *Endive or Sorrel water four ſcruples, Citrine Myrobalans*, infuſed in *Whey three drams*, ſtrain and add *ſyrup of Roſes Solutive two ounces*, for a draught.

In Tertians and Cholerick bodies take of hot and ſtrong purges for fear of a Diarrhæa, therefore beware of Scammonials and uſe the aforeſaid mentioned in a Cauſon, which provoke Choler. As take the Decoction of looſning flowers and fruits, as much as is fit thus made: Take *Prunes ten, Tamarinds one ounce*; *Sebeſtens and Jujubes, each ten*; *Raiſons one ounce, Dates five, flowers of Violets, Bugloſs and Borage, each one pugil*: *Gourd ſeeds half an ounce*: infuſe in this Decoction, *Rheubarb four ſcruples, Citrin Myrobalans two drams, Spike one ſcruple*, ſtrain it, and add *Caſſia half an ounce, Manna ſix drams*: make a Potion.

Or thus: Take *ſyrup of Roſes ſolutive, with the infuſion of Rheubarb one ounce and an half*, diſſolve it *with Bugloſs or Endive water*.

Or: Take *ſyrup Diaſereos* (which hath many cooling and opening things) *one ounce and an half*: diſſolve it as afore.

Or thus, to provoke Urin alſo: Take *Succory, Graſs and Aſparagus roots, each two drams*: infuſe them in ſharp Wine: *Endive, Burrage and Sorrel, each one handful*; *Tamarinds one ounce, the three Cordial flowers, each one pugil*; *Senna three drams*: make a Decoction, diſſolve in the ſtraining *ſyrup of Violets and Roſes ſolutive, of each one ounce*.

Or thus: Take *Diaprunis Lenitive, and Caſſia, each half an ounce*; *Electuaries of the juyce of Roſes two drams, with Sorrel, Bugloſs and Violet water*: make a Potion.

To Cure quotidians we give things that purge flegm, but in regard theſe Feavers do weaken much you muſt purge warily, with the things aboveſaid rather then ſtronger: Yet in flegmatick Conſtiturions: Take *Agarick one dram, Carthamus ſeeds skin'd three drams*: ſteep them in *Oxymel, Endive, Violet, and Maidenhaire water*, add *Catholicon one ounce*: make a Potion.

Or thus: Take *Aggregative Pills two ſcruples, with Endive water*; make Pills.

In continual quartans, add things againſt Melancholly: As, Take *Rhubarb four ſcruples, Indy Myrobalans two drams*, infuſe them in *Whey*, and diſſolve that ſtraining with a Decoction *of Mercury one handful, Epithymum two drams, Senna three drams*, add *ſyrup of ſweet Apples one ounce*.

Before the ſtate of the diſeaſe, or when after an imperfect criſis, the Feaver is not gone, you muſt again purge, diligently obſerving: firſt whether nature endeavor to evacuate by any other way, as Bleeding, Urin or Sweat, if ſhe doth not before the ſeventh day, or ſhew ſome ſigns thereof, purge again and open obſtructions.

Thus: Take *Rhubarb four ſcruples, Myrobalans chebs' and Indies, each one dram and an half*: infuſe them in *Endive, Wormwood water and a little white Wine*, then ſtrain and add *ſyrup Bizantinus, ſyrup of Roſes ſolutive, of each one ounce, or with the infuſion of Senna half an ounce*: make a Potion.

Or thus: Take *Diaprunis lenitive ſix drams, Electuary of juyce of Roſes two drams, ſyrup of Roſes ſolutive one ounce*, with the Waters aboveſaid or the common Decoction.

Or thus in ſtronger perſons: Take *Aggregative and Pills of Rhubarb, each one ſcruple*; *Pill Aureæ half a ſcruple, with Violet water*: make Pills.

In the Declination of the diſeaſe purge often with the ſame.

In the begnning of the Diſeaſe prepare the Humors, after a Lenitive, or in the progreſs if the Feaver continue: made with cold things to abate heat, and thin to make humors thick, and that reſiſt putrefaction and that cleanſe: adding alwaies openers that the Humors may paſs Urin, Sweat or Stools. And theſe are the better when they ſuppreſs heat and are prepared for the Heart and Liver which two parts are moſt hot. Theſe preparatives are given according to the cauſe and conſtitution of the ſick.

In a burning Feaver called Cauſon, whrch is an acute Diſeaſe and grants not long truce, we purge and alter with the coldeſt things.

In Synochus which is uſually in ſanguin perſons, prepare the Humors thus: Take *ſyrup of Lemons or of the juyce of Citrons, ſyrup of Vinegar and Violets, each one ounce and an half*; *water of Sorrel, Endive, Purſlane, Bugloſs, each two ounces*: mix them, give it three daies together.

Or thus: Take *ſyrup of Pomegranats, Lemons and Sorrel, each an ounce*; *of water Lillies half an ounce, Violet water, Lilly and Lettice water, each two ounces*.

Or thus: Take *ſyrup of juyces of Endive, Plantane and Purſlane, each half an ounce*; *Endive, Plantane and Purſlane water, each two ounces*; *ſyrup of Currans half an ounce*.

In a Tertian, and in Cholerick bodies, the ſame things are good, becauſe they allay Choler. Or thus, Take *ſyrup of Sorrel, Vinegar and Violets, each an ounce*; *water of Sorrel, Bugloſs and Endive, of each two ounces*; drink it two or three daies.

In

In Quotidians and Phlegmatick bodies and old folk, Take *Honey of Roſes, Oxymel, ſyrup Bizantine, each an ounce; waters of Maidenhair, Succory and Graſs, each two ounces.*

In quartans and Melancholick bodies: Take *ſyrup of Violets, Bugloſs, Borrage and Fumitory, of each an ounce; Purſlane, Fumitory, Bugloſs and Borrage water, each an ounce and an half*: make a Julep for three draughts, all theſe may be mixed with the Pouder of Sanders, or you may give after every draught a Lozenge of Trionſantalon, or Diarhodon.

Urin muſt be provoked and ſweat, for when the matter is concocted and prepared, nature doth uſually ſend it out thoſe waies, theſe are done by Aperitives which make thin; but you muſt obſerve whether nature moveth by Urin or Sweat moſt: if they piſs more then they drink, or the Urin be thick: or if they Sweat, you muſt provoke that way moſt to which nature inclines.

The Diureticks which open and attenuate, muſt not be hot but moderated howſoever with cooling things.

And ſomtimes purgers may be mixed therewith if the body be bound. It is done by this Decoction: Take *roots of Succory and Graſs, each an ounce; Liquoriſh, Fennel and Parſley, each half an ounce; Maidenhair and Endive, each an handful; Polypody roots ſix drams, Senna half an ounce, Anniſ ſeeds a dram, of the great and final Cold ſeeds, each half a dram; Cordial flowers a pugil, Parſley ſeeds half a dram*: boyl them, diſſolve in the Liquor *the ſyrup of the opening Roots two ounces, ſyrup of Roſes one ounce*: make a Potion for twice.

Things that only provoke Urin, may be given three or four times, and then the purgers again. If nature provoke Urin, you may leave out the purgers, leaſt you hinder her intention.

The Decoction Sparagus in broath, provokes Urin, and juyce of Pomegranats.

And this Julep: Take *ſyrup Bizantive, of Endive, each an ounce; water of Endive, Maidenhair, Wormwood, each an ounce.*

If you will open more: Take *Honey of Roſes, Oxymel, ſyrup of Maidenhair, each ſeven drams; Water or Decoction of Graſs roots, Sparagus, Succory, each an ounce.*

Make an Emulſion to provoke Urin thus: Take *ſeeds of Gourds half an ounce, Melon ſeeds two drams, Cucumber, Pompion, Endive and Purſlane ſeeds, each a dram*; beat them, *and with Endive water*, make an Emulſion *with ſyrup of Sorrel one ounce and an half.* The ſimple Emulſion of the Cold ſeeds, is alſo good to take away wateriſh Humors.

Urin to provok

Pills for to provoke Urin, are made thus: Take *the troches of Roſes, Eupaterium, each half a dram; of Cappars* (in Melancholick perſons) *a ſcruple, with Smalage water*, make Pills: give them every other day, drinking after a little Barley and Fennel water.

Fontanonus gives water of Maidenhair, with Barley and Fennel water only.

If nature incline to ſweat, as ſhe doth about the declining of the diſeaſe, ſhe muſt be helped by art. The Diureticks aforeſaid by opening and making then do help, and other Drinks and Juleps.

Stilled waters alone, being very thin are uſually given as we ſhewed in a ſimple Synoch, to which the Chymiſts add ſpirits of Vitriol two or three drops or ſpirit of Niter or of Salt, which ſtrongly reſiſt putrefaction.

Anoynting of the Back and other parts, cauſeth ſweat: Thus, Take *Oyl of Chamomil and Dill, each half an ounce; Oyl of Violets and ſweet Almonds, each an ounce*; wet your Hands firſt in *Aqua vitæ*, and then uſe it.

Friction is good alſo to draw the matter outward.

Altering Medicines, are ſuch as cool and moiſten the heat of the fever, and reſiſt putrefaction; Theſe ſtrike at the Cauſe, and mend the ſymptoms that come from heat, as Head-ach, Watching, Reſtleſneſs. Therefore uſe Coolers and Moiſteners, in all Fevers, eſpecially Violent, when the blood is burnt and putrid. Sharp things are beſt, for they cool and reſiſt putrefaction alſo, if you add things that open Obſtructions. But there you muſt not cool ſuddenly as in a ſimple Synoch, but by degrees, leſt Concoction of humors be hindred, which cannot be made with Coolers only, for the corrupt part ought to be concocted. This is done by the means following.

For ordinary drink water is deſired and is good to cool, moiſten, and allay thirſt, it is given Crude, or Boyled, or prepared.

It may be given Crude if the Stomach be not weak, ſome wil not give it til the humors are prepared: Sometimes there is much given at a Draught, as in a Cauſon, or Synoch, or Tertian, to quench the great heat, and ſome by ſweating thereupon have been preſently cured. And leſt it be overcome by the heat of the ſtomach and turned into Choler (as they ſay) they give it often. And *Averroes* ſaith that he ſaved many times by giving four pints before Concoction. And if there be any hurt perceived by it, Vomiting cureth it, and laying hot cloths to the belly.

Boyled Water is better than crude in a weak Stomach, becauſe it is not ſo windy.

Somtimes it is compounded with things that nouriſh and reſiſt putrefaction, and make it pierce, or otherwiſe correct it.

Barley is accounted the beſt of Nouriſhers and Coolers. Therefore we give Barley-water, which nouriſheth very little, in a good quantity.

Bread beaten in Water til it be white makes it nouriſhing.

Salt-peter beaten with the white of an Egg in a Spring-water makes a cooling Drink that reſiſts putrefaction.

And ſo doth a little Sugar uſed the ſame way.

Almonds made like Milke with Water in a Mortar is uſual in *Germany*: But it nouriſheth too much, and muſt not be given in great quantity, becauſe little nouriſhment is required, and it is better for Food than a Julep to quench thirſt; with cold ſeeds it makes good Emulſion.

Things that reſiſt Putrefaction are uſually ſharp and ſweet.

Sharp things alſo cool and are very delightful, *Galen* puts a little Vinegar in Water, and juyce of Pomegranates. Wine of Pomegranates or the like is alſo commended.

Alſo ſharp Syrups mixed with Waters as of Vinegar Sorrel, Lemmons, Citrons, Currants, ſour Grapes, Pomegranats, Apples and ſour Plums, and ſharp Cherries are good. Things very ſharp may be given if there be a Flux as Syrup of Barberries.

The Waters to make the Juleps are of Endive, Lettice, Succory, Sorrel, and Roſes if you will bind.

Some ſweet things reſiſt putrefaction, and Sugar more than Honey, which eaſily turns into Choler, but becauſe uſually they hate ſweet things, therefore add Syrups that are ſweet and ſour. Alſo the Decoction of Currans is uſual and good.

Somtimes we add Correctors of Crudities when they are weak, the heat of which is overcome by the

plenty

plenty of the Water. Cinnamon is moſt uſual being ſweet either boyled or infuſed, or Coriander ſeed boyled, or Galangal, red Saunders is good to cozen the Patients when they expect Wine, eſpecially if there be a little Pomegranate Wine to give it a ſcent,

There are divers Potions and Juleps which alter and correct the diſtemper of the humor and whol body, to be given all along, mentioned among the Preparatives.

And this Decoction. Take *roots of Succory, Aſparagus, each an ounce; Endive, Lettice, Purſlane, Liverwort, Ducks-meat, each one handful; Bugloſs and Burrage flowers, each a pugil; Barley a pugil, Gourd ſeeds half an ounce, Fleabane ſeeds* (which are very cold) *a dram*, boyl them, add *Sugar* and *Vinegar*, boyl them to a middle conſiſtence between a *Water* and a *Syrup*, give *two* or *three ounces* alone or with others.

Or thus. Take *Endive, Succory, Sorrel, Liverwort, each a handful: Barley a pugil*, make a Decoction, ſtrain them, add *Vinegar* for the Poor, and *Syrups* for the Rich.

Or thus. Take *ſyrup of Sorrel two ounces, the Mucilage of Fleabane ſeeds half an ounce*, give *three ſpoonfull* often.

Sick People refuſe ſolid things to be eaten and had rather have Drinks for their thirſt. but for variety, they may take ſometimes dried Confections as the Tablets of Trionſantalon or the three Sanders.

Or theſe. Take *pouder of the three Sanders one dram, Diarrhodon one ſcruple, the Troches of Camphire half a ſcruple, red Coral half a dram, Conſerve of Roſes, Violets, Bugloſs, each half a dram*: with *Sugar* diſſolved in *Roſe* or *Endive water*, make *Tablets*, give them morning and evening and *Endive water* after them.

Soft Electuaries made of Conſerves are given the day after purging to ſtrengthen and correct the heat cauſed by the medicine, and in the whol courſe of the fever. Thus made. Take *Conſerve of Roſes, Bugloſs, Violets, each half a dram*; with *Sugar* or *Rob of Ribes* make a *Bolus*.

This is pleaſanter. Take *Conſerve of Roſes and Sorrel, each an ounce*; *of candied Citrons, Lettice ſtalks, and Gourds, each half an ounce*, with *Syrup of Ribes* make an *Electuary*, give it often, and thereupon a little *Endive, Sorrel or Bugloſs water*.

Clyſters when they are bound, are good to looſen and to bring the humors into the Guts, and for to alter, but becauſe they cannot be given cold, they are not ſo good as other things to cool the Stomach and whol body, and quench thirſt, they are better to looſen than cool. They are mentioned among the Looſeners.

This is beſt to cool. Take *Lettice, Purſlane, Violets, Mallows, Houſleek, each an handful*; *Barley a pugil and an half, Cordial flowers a pugil, Gourd ſeeds half an ounce*, boyl them, add *Oyl of Violets three ounces, Honey of Violets two ounces, Diaprunis or Caſſia an ounce*, make a *Clyſter*.

Things may be given in the meat to nouriſh and cool, or for ſawce, but the Pacient muſt rather have them in drink, though the Vulgar love to be cramming them.

Boyl Lettice, Sorrel, Purſlane, Burrage, Endive, in Broath, and Spinach or Arrach, or Laxative herbs if need require it is pleaſant and good. to take Savory broath, made with Sorrel, Spinach and Arrach and with an Egg and a little ſharp Wine, or Vinegar and Water, beaten and boyled a little, pour it upon Sippets of Bread.

Or boyl theſe forms in Broath. Take *Lettice and Sorrel ſeed, each a dram*; *Melon ſeed two drams, Trionſantalon half a dram, Coral a dram, Diamargariton frigidum a dram and a half*. make them as big as Fetches.

Make ſawces of Orenges, Lemmons, Cherries, Pomegranats, Ribes, unripe Grapes, Barberries, dried Prunes, a little boyled or ſtoned, ſharp Apples and Lemmons, with Sugar and Roſe-water.

Alſo of the juyce of Sorrel, Vinegar, and Sugar and pickled Purſlane, with the juyce of Secalis in the Spring, with crums of bread, Vinegar, Cinnamon, and a little Ginger is good ſawce.

Outward things are to be regarded, as Air.

That muſt be very cold by nature or Art, for it is actually and potentially cooling for the Lungs, which being neer the heart, refreſheth it much. It is allowed for breathing but not to be naked in (as the Patients deſire in the extremity of heat) leſt the ſweat be ſtruk in. Beſides the body muſt not be inflamed with too many cloaths, eſpecially Feathers or Furs, and therefore it is good to change the Sheets, and Shirts, and Bed, and lay a Leather upon the Pillow. And to keep away the Sun and company, eſpecially at noon to keep out the Air, and not let it in, but when cool. To ſprinkle the Chamber with Water, and Vinegar, Flowers, and cool herbs, Willow leaves, Vine leaves and Water Lillies.

To the Heart, Liver, and Kidnies, apply coolers, and to the Brain in time of Head-ach, and Doting by reaſon of heat, and to thoſe parts which conſent with the Head, as the Stones. The Heart muſt be cooled at firſt in a burning Fever, in others in the increaſe after the matter is evacuated, becauſe all the parts are inflamed from thence; adding always things that properly refreſh this noble part, and can carry the vertue to it. Theſe are to be applied to the Breaſt or Wriſts in form of Epithems or Oyntments. and to other parts where the Arteries beat, They are thus made.

In a Cauſon apply an Epithem preſently to the Heart, As, Take *Roſe water two ounces, Violet, Bugloſs, and Lettice water, each an ounce*; *Scabious water half an ounce, Vinegar of Roſes or Clove Gilliflowers, half an ounce, juyce of Lemmons or ſour Apples two drams, Diamargariton frigidum a dram*, mix them for an *Epithem*, apply it with Scarlet if the heat be great, cold, or otherwiſe warm.

Another. Take *Roſe water two ounces, Sorrel, Bugloſs, Violet and Water Lilly water, each an ounce; Water of Scabious, Balm, Vinegar, White Wine each half an ounce; juyce of Lemmons, or Orenges or Apples, two drams, Sanders one dram, Ivory and Harts-horn, each half a dram; red Coral and precious Stones, each two ſcruples, Pearl half a ſcruple, Cryſtal half a dram, Saffron half a ſcruple*. make an *Epithem* for the Heart and Pulſes.

Or bind this Bag to the Wriſts and Feet. Take *Flowers of red Roſes, Violets, Bugloſs, each half a dram*; *pouder of Cloves half a dram, of Saunders and Wood Aloes, each a ſcruple*; *Saffron five grains, Diamargariton frigidum half a dram*, bind them in two little bags, ſprinkle them with *Wine, Vinegar and* Juyces, and bind them to the *Pulſes*.

An Oyntment for the Heart and Pulſes. Take *Oyl of Violets and Roſes, each an ounce; the Mucilage of Fleabane ſeeds half an ounce, Gallia Moſchata a dram, Camphire ſix grains, Saffron half a ſcruple, juyce of Lemons two drams*, mix them.

Oyntments for the Liver and Epithems to cool it, and ſtrengthen and open it if ſtopped, for the Liver is hot in Fevers and inflames other parts. Thus, Take *Lettice, Water-lilly and Nightſhade Water, each one ounce and an half*; *Roſe-water an ounce, Endive and Succory wa-*

ter, each two ounces; Vinegar of Roſes an ounce, Camphire ſix grains: make an Epithem.

Another better againſt obſtructions: Take *Endive, Liver-wort and Succory water, each two ounces; Roſe water an ounce and an half, Lettice and Houſleek water, each an ounce; Wormwood water ſix drams, powder of the three Sanders, Spike and red Roſe leaves, each half a dram; Vinegar one ounce, Troches of Camphire half a ſcruple.*

If you add Salt-peter or Lapis Prunellæ, theſe Epithems will cool more and reſiſt putretation.

Alſo this Bag: Take *flowers of red Roſes, Violets and Succory, each a pugil; all the Sanders half a dram, ſeeds of Sorrel, Endive and Purſlane, each a dram; Parſley ſeed half a dram, Spikenard a ſcruple,* ſow them in a red cloth being bruiſed, ſteep it in *Vinegar, Roſe and Endive water,* apply it warm to the Liver.

After anoynt with Oyntment of Sanders: or with Oyl of Roſes and Violets, with Spike and Wax.

Becauſe the heat of the Reins is great, which inflameth other parts; uſe *Galens* cool Oyntment.

Or thus: Take of Galens *cool Oyntment two ounces, Oyl of Violets and Roſes, each an ounce; Vinegar half an ounce, Camphire five grains:* Mix them, and anoynt.

The Stones have a conſent with the Reins and the whol Body, by reaſon of many Veſſels, therefore to cool them, abates Inflammation of the Body.

Thus: Take *water of Plantane and water Lillies, each four ounces; Vinegar of Roſes an ounce, red Wine an ounce and an half,* wet a clout therein and apply it cold.

Cold waſhings of the outward parts by reaſon of the conſent and the Veſſels under the Skin and the Nerves, do the ſame and cauſe ſleep.

Thus: Take *Lettice, Violet, Houſleek, Purſlane, Vine-leaves, Willow, each one handful; Poppy heads twelve, or the leaves,* if ſleep be wanting *one handful, Vinegar an ounce, white Wine half a pint, water as much as is ſufficient,* waſh the Hands, Arms, Legs and Feet, with the Decoction, warm at night.

It is good to hold cold things as Stones and Apples in the Hand.

It is good in Feavers to keep up the ſtrength, if they are continual and acute, which we muſt have an Eye at. For when it fails, the Phyſitians labors in Vain, becauſe it is natures work to conquour a Feaver, and if ſhe yeild to the diſeaſe, there can be no perfect *Criſis*, but it is either imperfect or the Patient dieth in the battel. Strength is preſerved, by order in good Air, meat and drink, and the like, and by Medicines.

Air doth much refreſh, if it be cool and pure, for then it refreſheth and altereth.

Food as it is neceſſary for ſick & ſound to reſtore what is loſt, while they live; ſo it is required here, becauſe the body is diſſolved with heat, but becauſe it muſt be concocted by nature, by which means ſhe is hindered from concocting the matter of the Diſeaſe, eſpecially if any quantity be taken: Therefore let ſo much ſerve as will juſt ſuſtaine and not put nature to too much trouble to concoct it: Let it be thin as *Hippocrates* ſhews in acute diſeaſes, and that little nouriſheth, and given at certain times. Or extream thin; or indifferent thin: alwaies obſerving cuſtome which is another nature.

Hippocrates ſaith that an extream thin Diet is to be uſed in the vigor of the diſeaſe, this the Patient endures beſt at that time. And it is the better extream to give too ſparing a diet at that time then too much, by which the common people think to ſtrengthen nature to over come the diſeaſe.

This is the moſt ſparing which is given, but once a day: or twice when of little nouriſhment.

As Barley broath twice a day in the ſtate only of the Feaver.

Or a Ptiſan which is ſtronger, this is the cream or juyce of Barley hulled and cleanſed. And it is given thinner or thicker, as you pleaſe, as you deſire it ſhould nouriſh. This allayes choler alſo.

And alſo the juyce of Wheat called Starch, or Rice, well boyled doth eaſier digeſt and leſs ſwel.

The *Germans* uſe Hen or Chicken broath with alterers. And they are good.

Alſo cream of Almonds or Emulſions is given not as drink but meat.

That ſlender diet which is fuller a little then this which *Hippocrates* ſaith muſt be at the beginning and continue to the ſtate, muſt be alſo uſed. But when the exacerbation or fit comes, or a little before, the Patient muſt not eat, not only to prevent the hinderiog of natures motion but to keep the heat from increaſing which it doth after meat as we ſhall ſhew in Hectricks.

The fuller but ſparing Diet: is that which is given oftner as twice or thrice in a day, and hath more nouriſhment.

As the beaten fleſh of a Chicken well boyled firſt, and waſhed with its broath, or ſtronge broath of the ſame.

Eggs, becauſe in cholerick perſons they quickly corrupt, are not to be given raſhly: nor Milk, for the ſame reaſon, which *Hippocrates* proclaimes to be naught in Feavers.

To this Diet belong ſops in broath.

Prunes, Apples, Peares, not ſharp but freſh or new gathered, or throughly dryed, (for then their juyce is moſt excellent, and therefore the Germans keep all ſorts of fruits ſo preſerved and dryed) or boyl'd in their Liquor or ſyrup wherein they are kept.

The other are made of Plants and are given for alteration rather then nouriſhment, as ſower fruits.

Wine is beyond all for refreſhing, and is not allowed but in the declining of the Feaver, by reaſon of its heat, eſpecially when they ſweat, and alſo becauſe it cauſeth Head-ach which is uſual in a Feaver. But in the declining it may be given to provoke Urin and refreſh, and alſo a fuller diet, often and of little nouriſhment.

Sleep refreſheth, yet of ſome it is denied all the time of the Feaver while the heat goes outward, leaſt by ſleep it ſhould come inward. But it is in vain to fear it, becauſe heat by ſleep goes outward rather then inward at which time we ſee men are more hot and ſweat, and alſo becauſe it allayes thirſt. Moreover nature makes better concoction in time of ſleep, and is active at that time in overcoming the cauſe of the diſeaſe. Nevertheleſs in the exacerbation or fit of the Feaver it is better to abſtaine from ſleep. And at othertimes to permit it according to age cuſtome, and as they are well or ill after it, that it be not immoderate or unſeaſonable. And if the patient be long without ſleep, to give and apply things to provoke it.

Frictions inſtead of exercciſe, in regard they cannot perform more, do ſtir up the ſtrength, to expel the cauſe of the diſeaſe.

A reſolute mind alſo, not too ſad, eſpecially confidence in God and his Miniſter the Phyſitian, with hope of ſafety in this, or the life to come, is a great help to ſtrength.

As for Medicines we have ſhewed reſtorers among the alterers, which alſo hold up the ſtrength: beſides which, we have declared many in our treatiſe of Sowning, and in ſwoning Feavers.

When

When the ſtreugth is wholly dejected give this julep. Take *Roſe, Bugloſs and Scabious water, each one ounce and an half; Cinnamon water made with Wine* (for the heat thereof is not then to be feared) *half an ounce, Speciés Diamargariton frigid half a dram,* ſtrain them, and add *Manus chriſti perled one ounce, juyce of Lemons one dram,* give a ſpoonful at a time.

Or thus: Take *Confectio Alkermes a dram,* (if there be no looſneſs which will be provoked by the *Lapis Lazuli* in it) *ſyrup of Poppies half an ounce, Cinnamon water two drams, with Bugloſs water,* give it ſomtimes with a little added.

The external things to be applied to the pulſe and Heart, are mentioned in the alterers.

As for the Symptoms, many of them are mentioned in the Cure of the cauſe and the diſeaſe, though ſome require a peculiar cure, which ſhall be ſhewed in the practice, but here we ſhall ſhew briefly how we are to proceed.

Head-ach and doting that follows preſently after, which are the chief, are amended with the things that are given againſt the cauſe and the diſeaſe; becauſe they ſuppreſs vapors and burning in the Head. Yet when they are ſtrong we open the Vein under the Tongue, and uſe Scarification, Cupping and Friétions for revulſion. And apply to the Head topicks at firſt to repel, then to aſſwage pain, and afterwards to diſcuſs as we ſhewed in the Treatiſe of Head-ach.

We hinder too much watching or waking with ſleeping Medicines and Narcoticks in time of neceſſity mixed with Cordials above mentioned, and coolers to correct them becauſe they would heat alone given, and increaſe Head-ach. If they ſleep too much we take it off with revelling means.

Thirſt is quencht with cold drink and ſharp, many give candied things which cauſe it by ſweetneſs; Alſo it is allayed as we ſhewed by ſleep, reſtleſneſs is abated with cold things eſpecially drink, and by changing the place which by continuance in they make hot, and by taking cool Air.

We ſhall ſhew hereafter the Cure of the Tongue, Mouth and Jaws inflamed, and the quinſie which is in Feavers alſo of the dryneſs and clammineſs of the Mouth and blacknes of the Tongue.

The pain of the Heart is cured by anoynting of the Stomach; The Swoning, as we ſhewed afore: The heat of the Hypochondria or ſides by things applied to the Liver and Reins as we ſhewed.

For the ſhortneſs of breath we anoynt the breaſt: in a Diarrhæa or Flux we apply things to the belly and give inward things that bind without heat, as ſyrup of quinces: when the body is bound we give Laxatives. If a Hectick is ſuſpected from the leanneſs of the body we apply to the Heart and Breaſt, Epithems and moiſtning Oyntments, and give often the mentioned Cordials, and ſuch as ſhall be explained in the Cure of the Hectick.

The Cure of intermitting putrid Feavers.

Intermitting putrid Feavers are Tertians or quartans ſimple, whereof ſome have one well day others two: or double which come every other day: and theſe are either equiſite made of a ſimple Humor, or baſtard from mixed Humors of divers kinds. We make no more kinds of theſe which others mention are either comprehended under theſe, or not known; we ſhall ſpeak of Feavers Compounded of intermitting and continual by themſelves.

The judgment of all theſe is more certain then of continual Feavers: for (as I ſay) tertian are ſhorter, if exquiſite and in Summer or Spring, but longer if baſtard and begin in harveſt: quartanes are longeſt that begin in Autum, they continue ordinarily ſix months, and ſomtimes but three, and by want of knowledg are kept ſomtimes a whol year: All double Feavers keep their own nature.

Theſe Feavers of themſelves are not deadly, although the exquiſite are very ſharp, becauſe their cauſe lyeth far from the Heart in the lower belly about the Excrements as we ſhewed, for whence alſo it may better be purged. Except it be carried into the great Veins and cauſe a continual Feaver, which is dangerous. It hapens alſo often that if intermitting Feavers laſt long or come often, that new diſeaſes follow from hurt of the Liver, Spleen, Stomack and Guts, and greater Symptoms, as the Colick, Jaundies, Dropſie and the like, by error of the Patient or Phyſitian.

We ſhall ſhew the Cure of all, both Tertian and quartans. Becauſe they are all from the ſame cauſe that is choller and in the ſame place that is the Meſeraicks: although ſome have treated of them in reſpect of diverſity of Humors natural and preternatural, making baſtard Tertians, from Citrin, yellow Choller which is mixed with thin flegm or from yolk-like Choller, which is mixed with thick flegm, calling both of them Tertians of greater fame, and call the other a Tertian of leſs fame, which is mixed with Melancholick juyce, and preſcribe a particular Cure for that which comes of green Choller like verdigreeſe. And will have the divers baſtard quartans from, not only the burnt dregs of blood, but from Choller and Flegm burnt. And will have quotidians, not only from ſimple flegm but ſweet, ſower, ſalt, glaſſie, called *Epiala* and *Lipyria*, and ſay they come from that flegm mixed with Melancholly or Choller, and teach a particular Cure for them all: as alſo of Syncopal or Swouning Feavers as if they were divers kinds. Hence come the many confuſed treaties of Feavers and the diverſity of purges according to the diverſity of humors that cauſe them as they ſuppoſe, which if any ſhould follow, they may as ſoon Cure their patient by leaving the whol work to nature, which often times doth it alone.

Therefore we ſhal ſpeak of the Cure of all Agues, or intermitting fevers together. Firſt ſhewing what is to be done, by Evacuations to remove the Cauſe, and by Alterers, and Reſtorers or Stengtheners, and to be obſerved in Diet. And laſt what is to be done to the Symptoms.

In reſpect of the Cauſe we muſt take it away, or abate it by Evacuations, which we ſhewed was putrid cholerick blood in the Meſaraick Veins. And if thin be not firſt taken away, they which go about by other means to hinder the fits and ſtop their courſe, and the motion of Nature, by which ſhee ſhakes off ſome of the Cauſe, as moſt Empericks and unlearned Phyſitians do; bring greater Diſeaſes, as Colick, Jaundies, Cachexy, either with the Fever or after it. Therefore firſt take away the Cauſe by Evacuations, by which means the heat of the Diſeaſe and the ſymptoms wil be abated, This is done as followeth.

Taking of blood from the meſaraicks, is the chieſeſt Remedy (becauſe the Cauſe is in it) to Cure Agues, as opening the branches of the hollow Vein, is to Cure continual Fevers. But none of the Meſaraicks come to the skin to be cut open, as the branches of the hollow Vein do, nor is it ſafe to make them bleed by corroding Medicines as hath been done by the uſe of Coloquintida, whereby the blood is ſent into the Stomach and Guts, and ſo forth by Vomit and Stool, for

feat

fear of Dyſenteries or Bloody fluxes. Therefore we do it thus.

The Flux of the Hæmorrhoids cures not only Quartans but Tertians of all ſorts, though of long continuance, when all meanes fail: And it is no marvail, ſince theſe Veins are branches of the Meſaraicks, and evacuate, by bleeding, the cauſe of the Diſeaſe. Therefore if the Hæmorrhoids bleed naturally, as in ſome, they muſt not be ſtopped, and if little, they muſt be provoked. But in Quartans which laſt long, it is moſt proper, by reaſon the blood is thick and beſt let out this way. eſpecially if nature incline that way by ſome ſigns of blood, or itching of the fundament, it muſt be helped. This is done by beginning with Fomentations and applying of Leeches, which is the beſt way of all, or rubbing with Fig leaves or the like, as we ſhewed in the Hæmmorrhoids. Some open them by cutting, but this muſt be warily done, for fear of a wound in the Fundament, which I have known to cauſe grievous pain.

If the Courſes be ſtopt in Women, although theſe come not as the Hæmorrhoids from the Meſaraicks, but from the branches of the *Vena Cava*, and ſo ſeems to take away none of the Cauſe of the Fever, yet becauſe it is natural, and ought to be at a ſet time, and though the whol body is made foul thereby, they muſt be provoked. And ſo the body wil be clenſed, and it wil do as much as blood-letting. Eſpecially in regard nature uſeth to clenſe her ſelf this way, and it may be there is ſome paſſage from the Meſaraicks to it, by reaſon of their neer joyning. Theſe Veins although by reaſon of their ſmalneſs, they open not wide, yet when they are ful they are ſtretched as the reſt. Therfore provoke the terms if they flow not, or flow diſorderly, divers waies, firſt by opening the *Saphena*, this wil either provoke the terms or take away the matter, and although a Vein was opened afore for general Evacuation, yet the next day you may open the *Saphena* by which means the fever either preſently ceaſeth or more eaſily removeth with help of other medicines. Alſo Purges do not only void the Excrements but open the Hæmorrhoids and terms as we ſhal ſhew.

Somtimes we allow, and ſomtimes diſallow of opening a Vein in the skin. It is to be omitted in exquiſite tertians and others which have great heat by reaſon of the burning Choler which cauſeth them. Alſo in flegmatick perſons, and aged, and the reſt it is not to be done raſhly, as the Vulgar do, who make it the chief part of the Cure: for it can do no good, becauſe it takes away none of the conjunct cauſe of the fever. But often being done raſhly, the matter is ſnatcht into the hollow Vein, and of an Ague it becomes a fever, or Continual, of Intermitting. Or the pure blood being ſent from the meſaraicks to fil up the emptineſs of the branches of the hollow Vein, that which remaineth behind being cholerick & putrid, becomes more fierce for want of good blood to temper it. Hence it is that I obſerved more hurt than good by opening Veins in Agues (except it be when we fear ſome inflammation of ſome internal part. In plethorick and cacochymick bodies we allow it, for theſe reaſons; when the plethory or fulneſs is great, which is known by the conſtitution, and red and thick Urin, and when there is heat after a fever, it may be allowed upon the wel day. Although ſomtimes in the beginning of a Fit it hindereth it, by repreſſing the heat and Vapors that aſcend, yet it cannot be good, becauſe the motion of nature is hindered, by which ſome of the cauſe of the Diſeaſe is taken away. Therefore blood muſt be let in time of reſt or interміſſion, eſpecially in double fevers, not in the beginning, but in the increaſe, or ſtate of the Diſeaſe, in Tertians, ſcarce before the third or fourth Fit which uſeth tobe the greateſt, foretelling the greatneſs of the following fi; leſt they think it comes from blood-letting chooſing the common broad Vein in the Arm, rather than the Liver or middle Vein, let the quantity be from five to eight ounces. In quartans 'tis thought good to open the Vein in the left Arm after they have bin a while for they muſt be gently ordered at the firſt, leſt they turn double or treble, or the ſtrength do fail which ought be kept by reaſon of the length of the Diſeaſe which it uſually hath. Or if you open the Vein called *Salvatella* next to the little finger in the left hand, they ſay it is a ſpecial cure for a quartan. We allow a Vein to be opened in Cachecticks or bodies of evil habit becauſe the blood in the Meſaraicks is not only impure, either before the fever begins (for impure bodies are eaſily taken with theſe Agues) or in the time of the Ague, to take away ſome of the matter leſt the Fever increaſe, or a new one. And if the blood taken be foul, let it bleed longer and in quartans if it be thick and black blood more, otherwiſe ſtop it: and if need require, ot it again another time. But leſt the the Choler ſhould be more fierce after the blood is taken away, give a little cooling ſyrup of Lemmons or Violets preſently upon it, or a little good Broath.

In Agues or intermitting fevers, we purge the thick humors by Vomit and Purges, and the thin by Sweat and Urin.

Firſt we give things to purge the Guts and clenſe them, both in the beginning, and in the progreſs of the Diſeaſe.

And this is done before bleeding and other medicines, that the medicines following may work better, and leſt bleeding ſhould draw the excrements into the Veins.

Clyſters do it ſooneſt, as thoſe mentioned in continual fevers, but we muſt alter them according to the Diſeaſe and conſtitution.

In Tertians and very hot fevers they are thus made. Take *roots of Marſhmallows one ounce, the four Emollients, each an handful; Barley a pugil, Gourd ſeeds half an ounce*, boyl them, and add *to a pint and an half, Caſſia half an ounce, Honey of Violets an ounce, Oyl of Violets two ounces*, with *Salt*, make a *Clyſter*.

In quartans. Take *of the four Emollients, Mecury and Beets, each a handful; Bugloſs roots two ounces, Prunes ten, the four great cold ſeeds, each two drams; Epithymum two drams, Aniſeeds, two drams*, boyl and diſſolve in them *Diacatholicon and red Sugar, each an ounce; Oyl of Violets two ounces, Chamæmel one ounce*, with *Salt*, make a *Clyſter*.

In flegmatick perſons, when flegm is much in the Guts, uſe this to clenſe more. Take *Liquoriſh two ounces, Mallows and Beets with the roots, Pellitory and Betony each a handful; Barley and Bran each a pugil; Agarick two drams, Figs ten, great cold ſeeds each two drams; Fennel ſeed three drams*, after boyling, ad *Diaphœnicon and Hiera Picra, each two drams; red Sugar and Honey of Roſes, each an ounce; Oyl of Violets and Chamæmel, each an ounce and an half*; with a little *Salt*, make a *Clyſter*.

Two or three Suppoſitories given in a day work ſomtimes better than Clyſters.

If at the beginning the Stomach be diſturbed with Crudities, Flegm, or Choler, as we may perceive by the Heart-burning which uſually accompanieth it, Loathing and Vomiting, before bleeding or when it is not required when we give a diminiſhing Medicine, or a Vomit.

Diminiſhing Medicines clenſe the Guts and Stomach

mach from Crudities and thick excrements: by these as *Hippocrates* saith, we make the body fluid. These are given in the day of rest, and are not to be choosen with that curiosity we use in continual fevers when the heat is constant. These are of three sorts as Clysters are.

In exquisite Tertians when the heat is great. Take *Cassia ten drams, pouder of Aniseed or Liquorish a scruple,* with *Sugar* make a *Bolus*: give it alone or with *Endive* or *Succory water.*

Or, Take *Cassia and pulp of Tamarinds, each half an ounce, Aniseed and Sugar* as abovesaid.

Or, Take *Cassia half an ounce, Syrup of Roses solutive* (or juyce thereof) *and Syrup of Violets, each an ounce*; with *Succory and Bugloss water* make a *Potion.*

Or, Take *Damask Prunes ten, Tamarinds twelve,* boyl them in *Broath* or *Water,* strain and drink it.

This is stronger. Take *Rhubarb four scruples, Spikenard one scruple,* infuse them in *Endive water,* and dissolve *Cassia half an ounce, Syrup of Roses solutive an ounce,* make a *Potion.*

In long melancholick quartans. Take *Cassia one ounce, pouder of Epithymum one dram,* with *Sugar* make a *Bolus,* or dissolve it with *Bugloss water.*

Or, Take *Epithymum two drams,* boyl it in Broath, and add *two ounces of Manna.*

Or, Take *Prunes ten, Dates two, Epithymum two drams Cordial flowers a pugil,* dissolve in the strained Liquor boyled, *Catholicon six drams, Syrup of Peach flowers an ounce,* make a *Potion.*

This is stronger. Take *Confection Hameck one dram and an half, Catholicon half an ounce,* dissolve it in *Bugloss and Fumitory water.*

In flegmatick persons give the same or stronger. Take *Catholicon half an ounce, Diaphœnicon two drams,* with *Sugar* make a *Bolus.*

Or, Take *Dates five, Prunes ten, Raisons ten pair, Figs four, Liquorish half an ounce,* boyl them, and dissolve *Diaphœnicon and Diacarthamum, each a dram.*

If they wil rather have Pils. Take *Pils of Agarick, Rhubarb or Mastich, two scruples.*

Or these stronger. Take *Aggregative Pils half a dram,* with *Syrup of Roses* make *Pils.*

A Vomit often doth good and is to be reckoned among these, for it takes away the crudity and flegm of the Stomach; and Choller, also if by the motion of the Feaver it get thither, but if the Body be bound, it must be first loosned, as we shall shew when we declare that the cause may be taken away by the same Medicine, where we shall mention Vomits. we must begin with the weakest.

We must also purge to take away the putrid matter of the Feavers from the Meseraicks. This doth it by degrees, and cureh the Feaver, but first we take away the thick Excrements and then prepar the Humors, if it be at the beginning, but afterwards if the matter be much, it seeks away out of it self and needs no preparation. And then natures motion must be helped, but if the Feaver abate not, we must come again to preparatives and purges, three or four times in obstinate Agues.

At the first prepare and purge thus, for preparation is necessary in intermitting and continual Feavers also, because the matter lieth in the Meseraicks, which is foul and needs more preparation and concoction, and we must hinder putrefaction and open the passages, that the matter may come from those Veins into the Guts by Medicines purging. which that they may work better, some anoynt the Hypochondria with Oyl of Chamomil and white Wine. These are divers according to the Ague and the constitution.

In acute Tertians to allay heat, expel putrefaction and quench Choler. Take *Syrup of Sorrel and Vinegar, each six drams, Syrup of Endive and Violets, each half an ounce, Endive and Sorrel water each three ounces*; make a *Julep* to take three daies.

Or thus. Take *Syrup of Citrons or Lemmons an ounce, Syrup of Endive and Violets, each half an ounce*; *Endive and Lettice water each enough*; give it thrice.

For the Poor. Take *Sugar two ounces, Wine-vinegar half an ounce, Decoction of Barley and Endive a pint and an half, juyce of Ribes or sharp Apples an ounce,* boyl them, then give it three or four times.

Or this. Take *roots of Succory and Dandelion the whol, each half a handful*; *Endive, Lettice, Liverwort, Sorrel each a handful*; *flowers of Bugloss and Violets, each a pugil*; *of the great cold seed, each a dram*; boyl them, and in *a pint and a half* dissolve *Syrup of Sorrel and Vinegar, each two ounces*; *or Pomegranate Wine four ounces,* give it at four or five times.

In long Bastard Tertians with obstructions; Take *Oxymel simple an ounce, Syrups of Endive and Succory, each half an ounce, Water of Maidenhair, Endive, Succory, each an ounce*; make a *Syrup,* repeat it three or four times.

Or, Take *Oxymel and Syrup of Succory compound each an ounce*; *Syrup of Maidenhair half an ounce, Endive water and of Maidenhair, each two ounces*: mix and repeat them as afore.

Or thus. Take *roots of Succory, Grass, Asparagus, Plantane, each an ounce*; *Fennel and Parsley roots, each half an ounce*; *Endive, Succory, Dandelion, Maidenhair, and Liverwort, each a handful*; *Bettony half a handful, the four cold seeds, each two drams*; *Endive and Purslane seeds, each a dram*; *Fennel, Annise, and Parsley seed, each half a dram*; *Barley a pugil, Prunes six, Cordial flowers, each a pugil*; boyl them, and dissolve *Oxymel simple three ounces,* perfume it with *Sanders one dram,* make a *Julep* for three or four *Doses.*

For the Poor. Take *Honey, Water and Vinegar* to make it sharp.

In quartans prepare thus in the beginning while the heat is great, for by continuance the heat abateth. Take *Oxymel simple, Syrup Byzantine each one ounce and an half*; *Syrup of Fumitory an ounce, water of Bugloss, Borrage and Hops, each three ounces*; give it at thrice.

Or thus. Take *Syrup of Sorrel, Byzantine, Bugloss, each an ounce and an half, Fumitory, Bugloss, Borrage and Endive water, each three ounces.*

Or this Decoction. Take *roots of Bugloss, Brambles, Sparagus, Succory, steept in Wine, each an ounce*; *Fennel and Parsley roots each half an ounce*; *Liquorish six drams, Tamarisk bark half an ounce, both Bugloss, the Capillaries, Germander, Groundpine, Bettony, each a handful*; *Cordial and Broom flowers, each a pugil*; *Raisons stoned two ounces, Prunes ten, great cold seeds, each two drams*; *Dodder, Parsley and Endive seeds, each a dram*; *red Pease a pugil,* boyl them, and add *Syrup Byzantine two ounces, Oxymel simple three ounces,* with a *dram of Cinnamon,* make an *Apozem* for three *Doses.*

Purge whether the humor be concocted or no, if it be much, and give an hour after a washing Medicine, of Barley or other Broath, with Sugar of Roses: and the day after, give a Strengthener.

In exquisite Tertians that are short and fiery, and in double Fevers, use mild things. Take *Rhubarb four scruples, Spike six grains, yellow Myrobalans rub'd with Oyl of bitter Almonds two drams,* Infuse them in *Endive water,* but first sprinkle them with *Wine,* after twelve hours strain them, add *Syrup of Roses two ounces, Syrup of Violets an ounce.*

Another. Take *Cassia half an ounce, Electuary of the*

juyce of Roſes two drams, ſyrup of Roſes and Peach flowers each an ounce, with Endive and Violet water: Make a Potion.

The third: Take *Barley a pugil, Prunes ſix, Jujubes and Sebeſtens, each ten; Tamarinds half an ounce, Cordial flowers a pugil, Senna two drams*: boyl them, add *Manna an ounce, ſyrup of Diaſereos or Roſes, with Rhubarb an ounce.* Make a Potion.

In baſtard Quartans and Tertians that are of long continuance, and in a flegmatick conſtitution: Take *roots of Succory half an ounce, Liquoriſh an ounce, Cordial flowers a pugil, Prunes ten, Polypody ſix drams, Carthamus ſeeds half an ounce, Annis ſeeds one dram, Senna three drams*: add *Rhubarb infuſed in white Wine and Endive water a dram, ſyrup of Diaſereos an ounce.*

Another: Take *Rhubarb a dram, Spikenard a ſcruple, Agarick infuſed in white Wine and Endive water a dram, with ſix grains of Ginger infuſed in Oxymel*, ſtrain them, and add *Manna two ounces.*

The third: Take *Catholicon half an ounce, Diaphenicon and Electuary of the juyce of Roſes, of each two drams; with Bettony and Endive water*: make a Potion.

Pills: Take *Pills Aggregative a dram*, made up with ſweet Wine.

A Pouder: Take *Rhubarb a dram, Cinnamon half a ſcruple, Turbith two ſcruples, Ginger a ſcruple, Senna a dram and an half*: give it with Peaſe broath.

In Quartans give not ſtrong Medicines while the heat is great: Take *Rubarb a dram, Indy Myrobalns prepared two drams, Spike, Cinnamon, each ſix grains; Epithymum two drams*, infuſe them in *Whey*, add *ſyrup of Peach flowers an ounce*, or that of *Apples* made by *Rondeletius*, which hath *Hellebor, an ounce.*

Another: Take *flowers of Borage, Bugloſs and Violets, each a pugil; Ceterach a handful, tops of Time and Epithymum, each two drams, Liquoriſh an ounce, Raiſons and Sebeſtens, each ten; Annis ſeeds two drams, Dodder ſeeds a dram, Polypody ſix drams, Senna half an ounce, Tamarinds half an ounce, rindes of Indy Myrobalans three drams*: boyl them, and add *in four ounces, ſyrup of Peach flowers or of Roſes or Senna an ounce, or of ſweet Apples.*

The third: Take *Catholicon half an ounce or ſix drams, or Diaſenna as much*, (which is good in quartans) *Confectio hamech two drams and an half, ſyrup of Bugloſs and Fumitory, each an ounce; with Bugloſs water*: make a Potion.

Vomits albeit they ſeem to take away only the matter from the Stomach, yet by natures motion they take the conjunct cauſe from the Meſeraicks, and either abate or take away the Feaver: and if the Feaver be of long continuance, as quartans, and will not be gone by purges, we give three or four Vomits to Cure them. And it is uſual by Vomiting abundance of Choller which is not very ſafe, for the Cholerick matter of the Feaver in the Meſeraicks, as it is taken from the Veins of the Guts by purges, ſo it is taken from the Veins of the Stomach by many and great Vomits.

Therefore Vomits are approved in all kinds of intermitting Feavers, eſpecially if there be loathing, cuſtom, or Heart-ach; and when nothing forbids, as binding of the belly; for if that be not open, except the Vomit by violence open it, it will be worſe: ſome diſallow them while there is crudity in the Belly as in quotidians, and will not give them before ſeven or eight daies: And ſay they are ſafer after ſigns of Concoction, and when Oxymel of ſquils or the like are mixed therewith to cut the Flegm, but that is little to the purpoſe for flegm is not the next cauſe of a Feaver. We have known quartans more cured by Vomits then any other: whence *Avicen* called Vomits the root of the Cure of Feavers. The time of vomiting is ſomtimes the well day. And if they Vomit eaſily, it muſt be given upon an empty Stomach, otherwiſe a ful: And before vomiting give broath of Peaſe, or Chickens, or fat Bacon (as in *France*:) Radiſhes, Cole-worts, Salt-fiſh to cleanſe and ſweet Wine, and after the Vomit taken they provoke it. Alſo a Vomit given at firſt, or in time of the fit and repeated is good and makes the Feaver gentler and ſhorter, eſpecially if it be given a little a fore the fit, for then the feveriſh matter being moved is eaſily expelled.

When the perſon is weak and the heat little, it is provoked by gentle things, but in long Agues with ſtrong, as quartans, and flegmatick Stomachs, which can indure ſtrongeſt Medicines. Thus: If the Throat be tickled with the Finger or a Feather or the like it is better that will ſerve alone ſomtimes when they are accuſtomed to Vomit after a ful Stomach. And if after the Vomit is taken it worketh not in a quarter of an hour, give a little Chicken broath and tickle the Throat:

The gentle Vomits are theſe: Take *a large draught of Endive water*, and put your Finger in your Throat to provoke Vomiting.

Or: Take *Oxymel ſimple an ounce, or an ounce and an half, or two, or three ounces*; and drink it with warm water.

Or: Take *Oxymel ſimple two ounces, the Decoction of Honey and Radiſh ſeed in water, ſix ounces.*

Or: *Three ounces of the diſtilled water of green Nuts.*

Or: Take *Chamemil flowers an ounce, Roſemary and Dill flowers, each half an ounce*: boyl them in *Radiſh water. Rondeletius* ſaith this hath Cured many at the firſt.

Some approve of the ſtinking Dock called *Lapathum, Atriplex* and *Purſlane*, ſo taken.

Or: Take *Atriplex ſeeds, Dill and Radiſh ſeeds, each an ounce*: boyl them in water, and if the flegm be tough in the Stomach, add *Oxymel ſimple or of Squils.*

Theſe are ſtronger: Take *Rocket, Leek and Radiſh ſeed, each half an ounce; Atriplex ſeed two drams, Aſarum roots a dram*: boyl them, and diſſolve *two ounces of Oxymel ſimple therein.*

Rondeletius highly commends the ſeeds of Aſarum and the roots, and Broom ſeeds with Cinnamon and Mace, boyled in Wine, according to *Dioſcorides.*

Or: Take *roots of Palma chriſti one dram and an half*, give it with Sack, in Poudar.

Take *Aſarum with the roots half an ounce*: boyl them to drink, or give *a dram*, or *half a dram in Wine*, or the like. I prepare them thus, I ſlice and cleanſe the roots and ſteep them two or three daies in Sack, and dry them in the ſhade, and keep the Pouder. The Doſe is *half a dram, or a dram*, to the ſtrongeſt.

Or: Take *Phaſeoli a pugil, of Dill, Atriplex and Radiſh ſeeds, each three drams; dryed Calamints a dram and an half*: boyl them, and to *four ounces* add *Oxymel ſimple or of Squils*, if flegm be tough.

Many have been cured by Stibium and other ſtrong Vomits, as white Helleboar: and then they Vomit abundance of flegm, with yellow and green Choller: and there is a great Evacuation from the Meſeraicks by nature moſt ſtirred up. But becauſe this is dangerous they muſt not be given raſhly to any as Empericks do.

We repeat purges differing according to Feavers oftentimes.

If after purging, an exquiſite Tertian double and Acute ceaſe not, it is ſufficient afterwards to keep the Belly

Belly open with a Clyſter, and to invite nature to ſend out the humor from the Meſeraicks, for which the Clyſter above mentioned muſt be often given or a ſtronger.

Or this, every other or third day. Take *Barley, Peaſe, each a pugil; Mallows, Violets, Beets, Atriplex, each a handful; Chamomil flowers a pugil, Annis ſeeds a dram*: make a Decoction, diſſolve *Honey of Violets, red Sugar, each an ounce and an half; Oyl of Violets three ounces, with the yolk of an Egg and a little Salt*: make a Clyſter.

If the Feaver ceaſe not give a gentle purging Clyſter as broath made of Orach, Violets, Spinage, Mallows, or a Potion of Rheubarb or Caſſia as aboveſaid.

In baſtard Feavers eſpecially long laſting, you muſt purge a freſh and prepare firſt, with thoſe above mentioned uſed diſcreetly and altered if need be,

Theſe Medicines that prepare the way and matter and evacuate are commended, if they are ſomtimes uſed and then a ſtronger given: In divers Formes.

As this Apozem: Take *roots of Succory, Aſparagus, Graſs, each an ounce and an half; Dock and Sorrel roots, each an ounce; Parſley and Fennel roots, each half an ounce; Liquoriſh ſix drams, Endive, Succory, round Sorrel, Maidenhair, Bugloſs, each a handful; Bettony, Burnet, each half a handful; four great Cold-ſeeds, each two drams; Annis ſeed a dram and an half, Fennel ſeeds a dram, Cordial flowers a pugil, Chamomil flowers half a pugil, Prunes and Sebeſtens, each ten; Tamarinds ſix drams, Carthamus bruiſed an ounce and an half*: Steep the roots in ſharp Wine and then boyl them all in water, and while the ſtrained Liquor is hot *Agarick half an ounce*: boyl a little, adding *yellow Myrobalans and Rhubarb, each half an ounce; with a dram of Cinnamon, a ſcruple of Spike, and three drams of ſyrup of Roſes Laxative*, give it every other day a good draught, and according as it works give more or leſs the next time.

You may boyl the half of it with Sugar, to make it laſt. And uſe ſomtimes the Apozem, and ſomtimes the ſyrup, or give it being all a ſyrup alone or with convenient liquor, or Barley or Peaſe broath.

While this Syrup is preparing, you may give ſyrup Diaſereos, or of Roſes ſolutive, with Rhubarb.

An infuſion in Wine is good becauſe many delight in Wormwood Wine, and Wormwood doth better allay the ſtink of Senna then anything, and amends the hurt that purges do to the Stomach, and the Wine being opening, helps it by piercing, and the heat can do no hurt being but a little.

Opening Wine is thus made: Take *Succory roots an ounce and an half, Graſs roots an ounce, Parſley and Fennel roots half an ounce; Orris roots two drams, Wormwood three drams, Germander, Ground-pine, Maiden hair, of each two drams; Sorrel, Liver-wort, Maudlin, each two drams; Cordial flowers, each a dram; Annis ſeeds a dram, Parſley ſeed half a dram, Senna one ounce and an half, Rhubarb three drams, Spike half a dram, Agarick four drams, Ginger bound in a cloute with the Spike a ſcruple*: pour upon them all of ſtrong Wine, daſhed with a little water, and of *Endive water five pints* (becauſe ſome part will be drunk up by the ingredients. Let them infuſe a night, and boyl in the morning, and cool by degrees, uſe it as the Apozem. Before mentioned, after three or four daies heat it again, to keep it from corrupting.

You may make Electuaries for the ſame thus: Take *Caſſia new drawn two ounces, Tamarinds pulped with Endive water an ounce and half, Manna an ounce, Catholicon, Diaprunis and Lenitive Electuary half an ounce; Rhubarb infuſed in white Wine til it be ſoft two drams, Spike a ſcruple, Senna a dram and an half*, (firſt ſprinkled with Wine) *Cinnamon and Annis ſeed, each half a dram, with ſyrup of the five roots and Succory with Rhubarb*: make an Electuary, take firſt *half an ounce* to try and then increaſe the Doſe by degrees, give it every other day alone or with Liquor as he pleaſeth.

Theſe are the uſual Pills: Take *Agarick two drams, Turbith a dram, Ginger a ſcruple, Rhubarb three drams, Spike half a ſcruple, Diagredium prepared with juyce of Roſes a ſcruple, extract of Wormwood a dram, with ſyrup of Roſes*, make a Maſs, take *half a dram* in the morning faſting every other or third day, drinking after a little ſyrup of Violets with Endive water.

If the Feaver abate not with theſe, uſe ſtronger as this Potion: Take *Liquoriſh an ounce, Rayſons an ounce and an half, Prunes ſix, Tamarinds ſix drams, tops of Time a dram, Polypody, Senna, each half an ounce; Carthamus ſeeds ſix drams, Annis and Fennel ſeed, each a dram*: boyl them, infuſe *Rhubarb four ſcruples, Spike half a ſcruple, Agarick a dram and an half*: ſtrain and diſſolve *Diaphœnicon a dram and an half*.

Or: Take *Electuary of juyce of Roſes, Diaphœnicon, Confectio hamech, each a dram and an half; ſyrup of Roſes, made with the infuſion of Senna an ounce, with Wormwood Wine and Endive water*: make a Potion.

Or theſe Pills: Take *Aggregative, of Myrobalans and fine Quibus, each a ſcruple*: make nine Pills, *with white Wine*.

In long Quartans you may ſomtimes reſt a month and then prepare and purge again. The humor being Cholerick and thick, blood is thus prepared: Take *ſyrup of Fumitory and Epithymum, each an ounce; ſyrup of Violets and of Endive, each half an ounce: waters of Fumitory, Bugloſs and Endive, each an ounce and an half*: add *yellow Sanders*, and drink it five or ſix daies.

In Spring when Herbs may be had, or *Autumn*: Thus: Take *of both Bugloſſes, Hops, Fumitory, each a handful; beat them with two ounces of Vinegar*: ſtrain and add *the juyce of ſweet Apples a pint, with Sugar*, drink it often.

Afterwards purge as formerly. Or thus: Take *Damask prunes ten, Rayſons, Jujubes, Sebeſtens, each twelve; Cordial flowers a pugil, Annis ſeed a dram*: boyl them in water and white Wine, add *yellow and Indy Myrobalans rubbed with Oyl of ſweet Almonds, each three drams; Rhubarb a dram, Spike ſix grains, Senna half an ounce, Epithimum and tops of Time, each a dram and an half*; ſtrain and add *ſyrup of Roſes ſolutive an ounce and an half; Catholican half an ounce, Confectio hamech a dram*: make a Potion.

Or with theſe Pills: Take *Pills Aggregative, of Myrobalans and Turbith in Powder, each a ſcruple*: make Pills *with five grains of Ginger and white Wine*.

To prepare and purge together, make this Apozem, Take *Sparagus and graſs roots, each an ounce and an half; Smallage and Parſley roots, each an ounce; Tamariſk and Elder, of each an ounce*: ſteep all in Wine, add *Borage, Bugloſs, Maidenhair, Ceterach, each an handful; Germander, Ground pine and Bettony, each half an handful; green Mercury a handful, Cordial, Roſemary and Broom flowers, each a pugil; Annis and Parſley ſeeds, each two drams; Dodder and Fennel ſeed, each a dram; four great Coole ſeeds, each two drams; Rayſons two ounces, Prunes ten*: boyl, ſtrain, and infuſe *Carthamus ſeeds an ounce and an half, roots of Polypody four ounces, Senna two ounces, Agarick three drams, Myrobalans, Indy and Citron, each half an ounce; Epithymum and tops of Time, each three drams*; infuſe them hot, then boyl them a little, add *a quart of the juyce of ſweet Apples with Sugar and Cinnamon two drams*: make a ſyrup, give *an ounce*, or more alone, or with Whey or Bugloſs or Borrage water.

You

You may infuſe the ſame in Wine, allaying it a little with Water, and adding Wormwood, for bitter Wine is more pleaſant than bitter Decoctions.

A gentler Infuſion is made of dry things thus. Take *Graſs, Succory, Parſley and Fennel roots, each an ounce; Wormwood, Germander, Groundpine and Bettony, each a dram; Fumitory and Hearts-tongue, each two drams: Cordial flowers a pugil, Epithymum and tops of Thyme, each two drams; Aniſe and Fennel ſeed each half a dram; dryed Polypody roots and Senna, each two ounces; Agarick three drams; Ginger half a ſcruple,* infuſe them in *Wine* and *Water*, and boyl as formerly. It needs no ſweetning, for the ſcent of the *Wormwood* muſt prevail.

An Electuary thus. Take *Catholicon an ounce, Diaſenna, Confectio Hamech, each half an ounce; Carthamus ſeeds peel'd and bruiſed ſix drams, Turbith two drams, Ginger infuſed in Oxymel a ſcruple, Senna two drams and an half, Aniſeed half a dram,* with *ſyrup of Epythimum* make an *Electuary*, give *ſix drams* alone or in *Whey*.

Or theſe Pils. *Take* Indy and Citrine Myrobolans rubbed with Oyl of ſweet Almods, each a dram; Rhubarb two drams, Turbith a dram and an half, Thyme and Epithymum each a dram; Senna a dram and an half, Cream of Tartar a ſcruple, Ginger and Spike, each ſix grains, *with* ſyrup of Epithymum *make a* Maſs, *give* two ſcruples or more as you ſee fit.

In quartans Pils of Agarick with Juyce of Eupatorium are good.

And after the uſe of them they muſt be purged again every third day.

Alſo Clyſters may be given all along to draw from the Meſaraicks, and to looſen: for by long lying, and heat, and faſting, the belly is often bound: We ſhewed you Clyſters of ſharp and opening things.

In melancholick fevers uſe this often. *Take* emollients each a handful; Balm, Fumitory, both Bugloſſes, each a handful and an half; Chamæmel, Meſilot, Broom, and Elder flowers, each a pugil; Carua ſeeds a dram, Fænugreek and Line ſeed, each two ounces; Bran a pugil and an half, Senna an ounce, *boyl them, and add* Honey of Violets and Roſemary flowers, each half an ounce; Confectio Hamec and Benedicta Laxativa, each two drams; Oyl of Chamæmel and Violets, each an ounce an half; *with a little* Salt, *make a* Clyſter.

This Clyſter is for Baſtard fevers, and flegmatick perſons. Take *Lilly and Marſhmallow roots, each an ounce and an half; emollient herbs, Atriplex, Mercury, Bauhm, Bettony, each a handful; Figs ſix pair, Dill and Fennel ſeeds, each a dram; Carthamus ſeeds bruiſed ſix drams, Senna ten drams, Chamæmel, Elder and Roſemary flowers, each a pugil*; boyl them and to *a pint*, ad *Catholicon and Diaphœnicon, each two drams*; *Hiera* Galeni *three drams, Honey and red Sugar, each an ounce; Oyl of Violets Lilies and Chamæmel, each an ounce*: with a little *Salt*, make a *Cliſter*.

Faſting belongs to Evacuations, for by it the humor is kept from increaſing, and that which is in the Meſeraicks is taken away by the Guts and Stomach, and ſo the fever is cured. *Theſſalus* cured fevers with his three daies faſt, and Empericks in our time labour to do the ſame. But in regard the Choler rageth by faſting conſtantly, and hurts the parts that draw it to them, eſpecially when it faſteneth to them producing the Colick, as I ſhewed, and brings worſe Diſeaſes, we wil not raſhly preſcribe faſting againſt fevers, by which means Sweat and Urin wil be hindered.

The thin humors paſs away by ſweat, or inſenſible tranſpiration or Urin, and cure the fever if the thick matter was firſt purged. This Nature doth ordinarily of her ſelf, when ſhee is fit for it. And therefore the Phyſitian being her ſervant ought to imitate her when ſigns of Concoction appear, in the declining of the fever, to take away the remainder, with Purgers, by Urin, Sweat, and inſenſible tranſpiration, aforementioned.

We mix things to purge Urin with Preparatives with an Eye to the fever, and ſomtime we uſe them after purging in the declining.

In ſhort and ſharp Tertians we uſe the gentleſt, that leaſt inflame, as Melon ſeeds and red Peaſe, and Parſley roots in broath.

Or Decoction of yong Sparagus in Ale, or an Emulſion of the cold ſeeds with Almond Milk.

Pomegranate Wine of the moderate taſt provokes Urin.

In Baſtard tertians and long fevers uſe theſe, and ſtronger as Chicken broath, with Parſley, Fennel roots, Borage, and Peaſe, and the like mentioned in the Diet.

Or thus. Take *red Peaſe a pugil, Barley half a pugil, Liquoriſh an ounce, Raiſons an ounce and an half; Fennel and Parſley roots, each two ounces; Melon and Gourd ſeeds each two drams*; boyl them in *lean Chicken broath*, drink it in the mornings.

Or thus. Take *Barley water a pint*, with *Fennel roots boyled in it*, and add *ſyrup of Maidenhair two ounces*.

Make it ſtronger thus, if the heat of the Fever be not great. Take *roots of Brambles, Sparagus, each an ounce; Fennel, Smallage, and Parſley roots, each half an ounce; Aſarum roots a dram, Endive, Liverwort and Maidenhair, each half a handful; Hyſop a handful, Fennel ſeed two drams, the four cold great ſeeds, each three drams; Peaſe a pugil*, boyl and add *Sugar* or *Honey* and *Vinegar* for old Folk.

This Decoction is admired of ſome. Take *tops of Wormwood two drams, red Peaſe ſix drams*, boyl and give *four ounces* after the back is anoynted as ſhal be ſhewed.

The Decoction of Dill with Rue, Honey-wine or Hyſop do the ſame.

Water of Gentian, Centory, Wormwood, or of Graſs, Aſparagus, Smallage, Parſley, Lovage, Valerian, may be uſed inſtead of the others.

Theſe Pils provoke Urin. Take *troches of Wormwood, Roſes, and Eupatory, each a dram*; with *Gentian water* make *Pills*, give a dram every day, drinking after it the *Decoction of red Peaſe, Melon ſeeds and Parſley roots*.

White thin Wine with water is preſcribed for ſome in the declining time.

Or this Infuſion. Take *Fennel and Sparagus roots, each an ounce*; *Wormwood and Hyſop, each a dram and an half*; *Chamæmel and Dill flowers, each a dram*; *Fennel ſeed a dram*, infuſe them in *Wine and Water* boyled or otherwiſe.

In long Quartans you may give the former and ſtronger, if the heat be decreaſed. As, Take *Liquoriſh, Raiſons, each an ounce*; *Parſley roots an ounce and an half, Aſarum roots a dram, Maidenhair, Cetarach, Hyſop, each half a handful*; *Hops a pugil, Sparagus ſeeds three drams, Fennel ſeed a dram, Melon ſeed two drams, red Peaſe a pugil, Chamæmel flowers a dram and an half*, boyl them in *ſix pints of Water*, add *Pomegranate Wine four ounces*, and drink it mornings with *Sugar*.

Wine and Water is good againſt quartans.

And this Infuſion. Take *the three capillary herbs, each a handful; Hyſop half a handful, Chamæmel flowers half a pugil, Fennel and Smallage roots, each an ounce; Aſarum roots two drams, Fennel ſeeds a dram, Dodder ſeed a dram and an half*, infuſe them in *Wine*, give it as afore.

Some

Some give this distilled water every morning two or three ounces for an excellent medicine. Take *strong Vinegar three pints, hot crusts of new bread a pound, Gunpowder two ounces*, distil them in *Balneo*.

Or. Take *Balm water half a pint, Aqua vitæ a pint, the pith of Dwarf-elder half a pound*, distil them, and give *two ounces* every morning and evening.

Also these Pils. Take *Troches of Wormwood, Eupatory, Rhubarb, each a dram*; with *syrup Bizantine* make *Pils*, take them as formerly with *Pease broath* in which *Roots* are boyled.

Sweating is good if the critical Excretion tend that way, for it helpeth Nature in the declining time to expel the residue. It is done by these following, and the gentlest, if they cause not swear, cause transpiration.

Frictions are good before the Fit two hours, and in the beginning of it when the heat begins to disperse the vapors and heat, and if violent they cause heat.

If Sweat be wiped off often it causeth more swear.

And boyled Water with Wine and alone in great quantity causeth Sweat. Therefore they who deny Drink to fevers and almost Kil men with thirst, do ill, for it hinders Sweat, and inflames the body, causing a Hectick.

Bugloss water taken in great quantity, causeth much swear, and is excellent in quartans. And also Fumitory, Scabious, Carduus, and Hearts-tongue Water.

This following Decoction provokes Sweat and Urine. *Take* of Barley a pugil, roots of Smallage, Parsley, Kneeholm, Sparagus, Nettles each an ounce; Orris and Elicampane-roots each half an ounce; Bayberries twelve, Chamæmel and Dil flowers, each a pugil; Pennyroyal, Calamints, each half a handful, Cummin, Anise, Fennel, and Citron seeds, each a dram; *boyl them in much* Water, drink it often.

Treacle is given for the same, and the like, which we shal declare among things that hinder Fits.

Also anoynting the back with loosning Oyls doth the same, and other things there to be mentioned.

A Bath is good in long fevers, to provoke Swear, and refresh, and moisten, of sweet water; in which Barley and moistning herbs are somtimes boyled. This must be used on the wel day, or five hours before the fit, not too hot. And after let the Patient take a dram of Mithridate or Diaboraginatum and swear in his bed. Thus many have been cured of quartanes.

Altering things resist the heat and drinesse of the Disease, and are cold & moist, and must be mixed with Resisters of putrefaction, things that open obstructions, and strengthen, because these differ not much, we shal distinguish them by Forms and not by Kinds of Fevers.

The best way is to give them in drink for they are refreshed thereby and delight in it.

In the fit because they are then driest, give crude or boyled water as we shewed. or Barley water, but in the fit Barley is too nourishing, therefore give little. that water is best, in which Sorrel and Grass roots are boyled, with steel prepared and Cinnamon, nor must they be kept from drink after the shaking Fit, for as *Fernelius* and *Joubertus* in his Paradoxes affirms that if the Patient be not relieved with Drink in his great heat and thirst, there wil follow a melting of the solid parts, and wil they not swear. In this also there is a moderation to be used, lest sudden cooling hurts the bowels, and cause a Dropsie, as in quartans its usual, this is to be regarded when the stomack is offended with cold drink, for then we give not much but corrected and qualified water, with an Eye to custom.

Out of the fit if the body be little cholerick, and not very hot; we give Wine with Water or Bugloss water in quartans and thin, sharp Wine in Bastard Fevers which rather cools than inflames. And it provokes Urin and strengthens. Therefore some boyl Hysop, and by *Galens* command Pepper or Cloves. Others give Ale to provoke Urin.

Out of the fit, and in the fit, we give these cool and moistening Drinks following. *Take* Elidive, Sorrel, and Bugloss water, each four ounces; Pomegranate Wine two ounces, *with* Sugar *make a* Julep, or sharp Syrup, as of four Apples, Ribes, Currans, Sorrel or Vinegar.

Or, *Take* one measure of boyled water, syrup of Lemmons or Citrons, two ounces, syrup of Violets an ounce.

Or, *Take* Sassaphras three drams, red Sanders and Sortel roots, each two drams; Cinnamon a dram, *(with Sugar two ounces, if you wil have it sweet) cut and bruise them, tie them in a clout, boyl them in water, to be given at any time.*

Or this syrup. *Take* ten pints of Water, Vinegar four ounces, Sugar four ounces, *boyl and drink.*

The Alexandrine Julep of Sugar and Rose-water, and others metioned in Thirst, the juyce of Purslane is commended by *Dioscorides*.

There are also divers Electuaries.

Give this the day after purging to strengthen. *Take* Conserve of Roses and Violets, each a dram; Trionsantalon half a scruple, *with* Sugar *make a* Bolus.

In bastard quartans. *Take* Conserve of Borage flowers and Bugloss roots, each a dram; Citron peels candied half a dram, Diamargariton frigidum half a scruple.

Or give a dram of Treacle with half a dram of Conserve of Bugloss.

In the Fit give we Electuaries to quench Thirst which must not be sweet. These are to alter.

Take Conserve of Roses and Bugloss each an ounce; of candied Citrons pulp and peel, each two drams; Rob of Ribes half an ounce, species Diamargariton half a dram, *with* Sugar of Roses *make a* Mixture.

Or this, *Take* Conserve of Roses, Rob of Ribes, sharp Cherries aud sharp Prunes preserved, each an ounce; Conserve of Bugloss half an ounce, *give it in time of Thirst.*

To alter and strengthen all the time of the disease. *Take* species of the three Sanders with a double quantity of Rhubarb a dram, Diarrhodon Abatis a scruple, Diamargariton frigidum half a scruple, Conserve of Rose and Bugloss roots, each a dram, *with* Sugar *dissolved in* Rose *and* Endive water, *and a little* Vinegar: *if the heat be great, make* Lozenges *to be eaten on the wel dayes.*

Sugar of Roses by it self or with other things, is much commended, and that called *Manus Christi*, and Trionsantalon, and Diacorallium.

In quartans for Melancholly. *Take* species of Diarhodon, Trionsantalon, each half a dram; Diamoschu half a scruple, *Lætificans Galeni* half a scruple, *with* Sugar *dissolved in* Rose *or* Bugloss water, *make* Lozenges.

Soft Electuaries. *Take* Conserves of Cordial flowers, each an ounce; Conserve of Hearts-tongue, Maydenhair and Ceterach, each half an ounce; candied Citron peels two drams, species of Diarrhodon, Diatragacanth frigid, and Diamargariton frigid, each a scruple; with the syrup of Citrons.

Or thus. *Take* Diabuglossati and Diaboraginati, each an ounce; Letitiæ Almasoris two drams, species

de Gemis, Aromatici Roſati, each half an ounce, with ſyrup of Apples.

Or for Melancholy: *Take* the four Cordial conſerves, each an ounce; Species Cordial for meat, fragments of precious, Stones and Pearls, each half a ſcruple; Gold leaves with ſyrup of Currans and Cherries or Sower Apples: *make an Electuary.*

Cooling Pills: *Take* Troches of Camphire two ſcruples, with Vinegar: *make Pills, give* half a ſcruple.

Mollifying Clyſters all the time of the Diſeaſe do alter.

And alſo moiſt Dyet.

Moiſt fleſh, as of young beaſts, Veal, Pigs, Kids, Chickens boyled, alſo brook Fiſh, ſeaſoned with Pepper. In quartans rare Egs are good, but in Cholierck ſtomachs, they ſoon corrupt.

Grapes are very refreſhing, alſo Peaches and Pippins.

Give bread ſopt in broath, and Cream of Barley.

Make broath with Lettice, Borrage, (and Bugloſs in quartans) with Endive and Sorrel, ſuch as we preſcribed for continual putrid Feavers, and give Bugloſs water in broaths.

Make ſawce of ſower Grapes and Vinegar, Capers and Olives well waſht from the Salt and our Compound called in High-dutch *Sumpiſt.*

Alſo Confections of ſower fruits, and the ſame crude (except there be other things that hinder) or dryed and ſoftned again are good.

Sallats alſo of Lettice and Vinegar and a little Oyl and Succory roots boyled and eaten with Oyl and Vinegar.

Let the Air be cool by nature or art.

Apply Epithems to cool the Liver. Thus: *Take* water of Succory and Endive, each four ounces; Wormwood water two ounces, yellow Sanders and Roſes, each a ſcruple, Spike half a ſcruple, Vinegar of Roſes half an ounce.

Then anoynt with the Cerot of Sanders, Oyl of Violets waſhed with cold water, each an ounce; Spike half a ſcruple.

For the Heart, this is a good Epithem: *Take* Roſe-water two ounces, Borage and Bugloſs water, each an ounce; Balm water half an ounce, Vinegar of Roſes ſix drams, Cordial ſpecies or Diamargariton a dram, Saffron a ſcruple.

Then anoynt the Heart and Pulſes with this: *Take* Treacle two drams, Oyntment of water Lillies a dram, juyce of Lemons half a dram, Saffron and Camphire each five grains: *make a Liniment.*

If the Reins be hot: *Take* the mucilage of Flea bane ſeeds, made with Roſe water an ounce, Sanders two drams, Camphire half a ſcruple, Oyl of Roſes and Violets, each an ounce; with Virgins Wax, *make an Oyntment.*

A moiſt Bath of moyſtning things is good in quartans to alter, and is beſt out of the fit, if the Ague hath been long. Albeit the vulgar people fear to moiſten in intermitting Feavers, and if they walk but near a River they fear a relapſe; And therefore by old Wives ſuperſtition forbid any that are recovered to croſs over a Bridge, or go by Sea, or in a Boat, or walk upon new broken up or tilled ground, wheras that moiſting of the body in long Feavers, when the heat a little abateth, is good eſpecially if there be a Conſumption.

There muſt be a good courſe of Diet in reſpect of food, Air, Sleep, and excerciſe, to keep up ſtrength, if the Feaver be ſharp, leaſt he fall, or to hold him up, if it be long.

The Air muſt be pure and free and ſomtimes perfumed.

Meat and Drink muſt be thin in the beginning of all intermitting Feavers. In which *Avicen* teaches that hunger and thirſt endured the firſt week conduceth much to the Cure.

And if they be long and Chronical as baſtard Agues and quartans, and they live ſparing the firſt three weeks, they are eaſily Cured. Afterwards a fuller Diet is allowed, and when the choller grows hotter in Tertians and quartans, and they cannot endure faſting.

In the fit we give no food leaſt nature ſhould be hindered in concocting the matter of the Diſeaſe, and leaſt the food ſhould be corrupted with preternatural heat and the Feaver increaſed, for we ſee that after meat it doth as in Hecticks. And then we deny nouriſhing drink, if but of Barley in any quantity, and Almond Milk, eſpecially when thick. But if the patient be cholerick and thin bodied, leaſt choller ſhould be enraged or an Hectick follow, we allow even in the fit, a little food, as to Children in reſpect of cuſtom.

Out of the fit Cholerick perſons may eat in the declining of the Feaver, and before it cometh two or three hours; But in long Agues, as quartans, it is good to faſt the whol day wherein they have their fit, and let food be given ſix or ſeven hours before the fit, or ſo long time before as a Concoction may be before it come. And this is to be obſerved in double Feavers that come every day, alwaies chooſing that time of reſt which is fartheſt from the fit, and feeding preſently after the fit, becauſe the Diſeaſe returnes ſoon. And let it be eaſie of Digeſtion, as we ſhewed in altering things and continual Feavers.

Wine is good in quartans and other baſtard Agues, becauſe it refreſheth: but give it out of the fit at meat and not immoderately, and if thirſt be great, give it with boyled water, white thin and new Wine is beſt eſpecially in cholerick perſons: old wine inflames; you may give red Wine if it be clear and daſht with water.

Sleep refreſheth, in the declining of the fit, as waking hurts: and ſleeping is hurtful in the beginning of the fit.

In quartans moderate excerciſe is good.

Paſſions of minde if ſad and inmoderte hurt, and pleaſant and moderate do good.

We have ſhewed what Medicines are fit to preſerve and reſtore ſtrength, in the alterers.

The Symptoms abate and depart with the diſeaſe: and if any of them be extraordinary, the Cure thereof ſhall be regarded; either by reſpecting all the accidents together, by hindering the fit: or by reſpecting that in perticular: of which hereafter.

The Paroxyſme or fit is when all the accidents from heat and cold appear; and departt with the fit: which fit and accidents, if hindered there is a Cure in part that is of the Symptome, not of the cauſe, but of the evaporation or motion that inflames the Heart. Things that take away chilneſs which is the firſt fit, do this; and then though heat follow the vulgar ſuppoſe the Ague to be cured or abated. And ſomtimes it comes to paſs that when ſhaking, by which means the feaveriſh matter paſſeth through the Body, is hindered, then both the hot and cold fit are prevented, and the whol feaver is taken away by giving that which prevents ſhaking. But this cannot be done ſafely before the matter be prepar'd and purged; for if the cauſe remain, though the Feaver ceaſe, worſe Symptoms may follow: As Empericks find, who ayming at nothing more but the Cure of the

fit,

fit, bring Cholicks, Jaundies and Dropſies. And ſomtimes we do willingly according to reaſon take away eth fit before the cauſe, if it be ſo great that it deſtroy-the ſtrength, or at leaſt abate it with extraordinary Medicines, yet ſo, that we go on ſtill Methodically to take away the cauſe. And it ſomtimes hapens, that after the cauſe is removed there are fits which come from cuſtom or habit: to prevent theſe at the firſt when they ſtretch and yawn, we give things againſt ſhaking which we mentioned, when we ſpake of depraved Motion. Thoſe things do it, either by taking away the matter which getting by degrees into the body, cauſeth the ſhaking: or by ſtupifying the ſences, or by heating the body ſuddenly at firſt, before the fit comes. All theſe are to be done warily, and not before preparation and purgation, and then you may give either a ſpecifical evacuation, or ſtupefactive or an alterer or a Medicine made of all theſe together.

It comes to paſs often, that by large eating before the fit, that nature removes from the cauſe of the diſeaſe to the Concoction of meat and hinders the fit. Hence the German Proverb *Sie haben das feber abgeſſen.*

The ſame thing is done by evacuations when nature is buſie to ſend Excrements upwards and downwards.

The fit is hindered by vomiting in the beginning of the fit, becauſe by it a revulſion is made of the matter from the Meſeraicks to the ſtomach, and the Feaver is quite taken away, ſomtimes by throwing out the cauſe by the Stomach and Guts.

Gentle purges prevent the fit, the ſame way (but ſtrong purges are dangerous to be given before it, becauſe they will work in the time of the fit and weaken) as Agarick, Senna, with ſome alterers. Theſe are the beſt compoſitions that follow. A Decoction: Take *Epithimum and Time, Polypody and Senna, each a dram; Borage flowers a pugil:* boyl and ſtrain, and give a draught afore the fit, with a little *Wine.* This is beſt in a quartan.

Or a Pouder: Take *Senna three drams, Turbith a dram, Pepper a ſcruple, Ginger half a ſcruple, Cinnamon, Myrrh, each half a dram; with Sugar as much as all*: make a Pouder for three Doſes, give one in white Wine afore the fit.

Helidæus gives a dram of Agarick with juyce of Fumitory and Fennel.

Others mix a dram of Diagredium with three ounces of Syrup of Violets, and give as much as a Chefnut an houre afore the fit.

Some give ſtrong bodies the Pouder of Mercury, with ſtrong Vinegar, Treacle and Sugar. And the Chymiſts inſtead thereof give Mercurius dulcis, or Mercurius vitæ, or Panchymagogum Rubrum.

Stupefiers are given afore the fit becauſe they take away the ſenſe of the parts, and provoke ſweat.

As Treacle a dram and an half, or more or leſs in Wine is highly commended; or in wormwood Wine, Carduus, Mints or Roſe water, ſome add Diatrionpiperion, that of the three Peppers, others Mirrh as *Dioſcorides.*

Alſo Panchreſtum Nicolai with Wine, or Methridate.

Dioſcorides commends three or four leaves of Henbane, with a dram of the ſeed thereof given in Sack at the beginning of the fit. If you repeat it twice or thrice it is a ſure remedy. Alſo ſyrup of Poppies given afore the fit prevents it.

Alſo divers alterers do the ſame, inwardly and outwardly, and motion of the Body.

Inwardly we give both hot and cold Medicines.

Hot becauſe they preſently inflame the body and drive away ſhaking, and then the heat which uſeth to follow the motion of the cold fit either goes away or is abated. And hot things do it by diſperſing the matter eſpecially when it is thin. And they cauſe ſweat. But vehement hot Medicines are not to be given before a Concoction of the matter, leaſt the thin be conſumed and the thick remain: and of a ſimple Feaver, there prove a double, or treble Ague, or a continual Feaver. This muſt be obſerved in giving of Treacle and other hot things, and Stupefiers above mentioned. Of hot things theſe by experience are found beſt. Take *Ginger half an ounce, Pepper a dram, Nut ſhels two drams:* boyl them in two pints of aſtringent Wine, and to five ounces ſtrained, add *an ounce of ſyrup of Violets,* give it two or three hours afore the fit and cover him to ſweat.

Or: Take *Gentian roots an ounce, Centaury tops and Serpyllum, of each three drams;* boyl them in Wine, and give a draught as aboveſaid.

Or thus: Take *juyce of Calaminth three drams* or *an ounce and an half of the ſyrup,* give it with Wine and Borage water.

Or this: Take *Gentian, Centaury and Plantane water, each an ounce and an half;* drink it with a drop of Oyl of Vitrial, or ſome drops of ſpirit of Salt or Niter.

Or: Take *Plantane a handful, Sorrel half a handful, Vinegar and Treacle, each four ounces;* Diſtil them, give three ounces of the water half an hour afore the fit.

Or give three ounces of the juyce Plantane with an ounce of the juyce of Purſlane half an hour afore the fit.

Or this Pouder commended in all Feavers though Peſtilential: Take *Sugar candy three drams, Ginger two drams, Camphire a dram;* make a Pouder, give *a dram* in hot water. This *Crato* commends.

Another: Take *the Pouder of Cray-fiſh, Mans ſkul and Ivory, each a ſcruple; Cinnamon half a dram, Saffron a ſcruple,* give a dram in Wine.

A third: Take *Myrrh a ſcruple, Pepper ſix grains, Ginger half a ſcruple, Sugar three drams,* give *a dram,* or make Pills, *with juyce of Gentian.*

An Electuary: Take *the Troches Rubiæ of Nicolas a dram:* give it with white Wine: or the Electuary of *Aſa,* in *Meſue, Triophyllon Nicolai.* Electuary of *Peter Arnold* of *Villanova.*

Or: Take *Cinnamon two drams, Pepper a dram, Saffron half a dram, Myrrh, Storax, Serapine, each half a dram; Benzoin three drams, Gentian roots two drams with Honey*: make an Electuary, give *half a dram or two ſcruples,* two hours afore the fit.

Coolers do it ſomtimes and ſtop the fit, but they are better external, becauſe they muſt be very cool, which will ſuddenly hurt the Heart, given inwardly.

Cold water, drunk largely in the fit cures many: Hence the Proverb *Das feber abtrincken.*

Two ounces of Pomegranate wine given in the fit, removes it, if you anoynt the Pulſes with the Oyntments following.

A famous Phyſitian gives the Cryſtal mineral in a great quantity in Spring, Plantane or Sorrel water in the fit.

Somtimes, External things do it, as excerciſe, Applications, Injections, Amulets and Superſtitious things.

Excerciſe doth it by heating the body and provoking ſweat before the fit. As Running, Riding, &c. Inſtead of excerciſe in weak bodies, you may rub them and cover them warm with cloths, or uſe Oyntments before the cold fit.

Alſo

Alſo Applications to the Wriſts, Temples and Ankles are uſed. They are ſuch as either divert or revel the matter from the Heart, and are ſharp: or ſuch as alter the diſtmper of the Heart, ſo that it will not eaſily be enflamed by the vapor, and defend it, being ſharp and temperate and cooling ſomtimes, mixed with piercing things to reach the Heart.

A burning, bliſtering Medicine is made thus: Take *leaves of Crow foot or Dove foot bruiſed with Salt and Vinegar, or the leaves of Thlaſpie bruiſed with Salt and Vinegar, or of Shepheards purſe, of Dentilaria Rondeletij, Rue, Savine, Marigold, Angelica, Nettles.*

As thus: Take *Elder-leaves, Rue, Marigold and Nettles, each a handful*: bruiſe them, *with Salt and Vinegar, or apply Garlick and Onyons* bruiſed, to the Wriſts.

The more cool are: Take *Plantan and Sowthiſtle, of each a handful*; bruiſe them, *and with a little Soot of a Chimney, Salt and Vinegar*, apply it.

Or this, which makes a black ſpot and a little corrodeth: Take *the inward bark of the Hazel Tree*, ſteep them in *Vinegar*, and apply it. I have uſed this often with good ſucceſs.

Alſo bread ſteept in Vinegar and applyed to the Pulſes.

This Remedy is approved by many: Take *a little Ointment of Poplar tree*, and mix it with clean *Cobwebs*: make great Pills, apply two to the Arms, two to the Feet, and two to the Temples, with a Vine leave before the fit: Repeating them after, if they Cure not at firſt.

Anoynt the Pulſes, Back and Body,

The Pulſes, Thus: Take *juyce of Rue, Boys piſs, each equal parts*; waſh the Pulſes before the fit.

Or: Take *Oyl of Chamomil* and boyl Spiders therein anoynt the Pulſes and Back-bone, or Oyl of Toads.

For the Back to prevent ſhaking: Take *Oyl of Chamomil three ounces, Oyl of Bays one ounce, Oyl of Caſtor half an ounce, Spiders and Earth worms, each ten*; *Aqua vitæ two ounces*: boyl them till the Aqua vitæ be conſumed and anoynt.

Mathiolus ſaith that anoynting from Head to Foot with Oyl in which the balls made of *Anthemis* flowers are diſſolved, cureth Agues.

Some commend the Fume of Cats dung.

Others give Anthemis in Clyſters.

There are divers Amulets, theſe are accounted of many the moſt infalible, a Spider hang'd about the Neck in a Nut ſhel. Mouſe-ear gathered in the decreaſe of the Moon tied in a knot of cloth about the Neck, or to cary the Snail ſtone, Jaſper ſtone, or to hold a Mole in your Hand, in the time of the fit til it die.

We will omit ſuperſtitious Characters and Charms as trifles.

And although we have ſhewed the Cure of Symptoms, yet we ſhall here ſpeak of them as they are in the time of the Feaver.

If watchings and Head-ach by reaſon of Vapors do offend, we hinder the vapors from riſing and provoke ſleep. If ſleep be too much we look to that.

We uſe things mentioned among the alterers againſt thirſt and dryneſs of Tongue by heat and Vapors.

Evacuations reſtore Apetite, and when the diſeaſe declineth, we ſtudy to hinder it leaſt they eate too much.

In Swounding Feavers we look firſt to the Symptom, and if it come from choller in the Mouth of the Stomach, the ſharpneſs thereof muſt be allayed. And then we give ſtrengtheners.

If there be pain in the Stomach from yolky or Leeklike Choler, or from Wind with rumbling, or from too much drink, they muſt be cured with things that abate ſharpneſs, ſtrengthen, and diſcuſs Winds.

A Looſneſs often comes from Choler, which muſt be cured, as we ſhewed in pain of the ſtomach, by Clyſters, as that of Barley water, and red Sugar two ounces.

There is ſomtimes a Colick with the Ague, by reaſon of Choler in the Guts, and ſomtumes after, when the cauſe is not removed, and it is cured as I ſhewed in the Colick. They ſay it comes from Glaſſey flegm in the fever *Leypra*, but we have ſhewed that a fever cannot come from this moſt cold humor.

There is often alſo Cachexy or ill-habit, Dropſie, hardneſs of the Hypochondria, Oedæamatous tumors in the Legs, in long fevers by reaſon of the hurt of the internal bowels, the cure of which is in their places.

In the declining there is a Leanneſs from Atrophy, or want of nouriſhment, or from the beginning of an Heetick after a double and acute fevers.

In a quartan often, there is a Tumor behind the Ears.

And ſometimes Worms are voided; to which we ſhal preſcribe particular Medicines.

The Cure of continual putrid Fevers.

A continual putrid malignant ſolitary Fever, which is often epidemical, or ſimply malignant, called by *Rondoletius* ſymptomatical, is cured as a putrid fever that is not malignant, and alſo a ſemi-tertian which ſome account malignant.

As for the predictions, they muſt be made by the ſame ſigns ſhewed in Putrid Continual fevers. Theſe ſigns being doubtful in putrid not malignant, and their Judgment uncertain, are more uncertain here where there is malignity, which ſo inſinuateth it ſelf into the heart, that when ſigns of concoction appears, the Patient dies of a ſudden, unexpectedly. Morover, Nature doth not keep her critical motions ſo orderly as in fevers not malignant, being more oppreſſed: And therefore we muſt be more wary here of pronouncing our Judgment of Life or Death from ſigns, among which the ſpots like Flea-bitings, or black, foretel Death.

The Cure of malignant fevers is done, as in other ſimply putrid. And we take away ſtil ſome of the Cauſe, which is putrid and malignant, and we alter the heat with things that cool and reſiſt putrefaction, and hold up the ſtrength, and prevent other accidents.

We Evacuate both blood and Humors, as followeth.

We preſcribe bleeding by Lancet, or Scarification, as in continual putrid, with reſpect to the ſtrength.

We purge other Humors, as in other putrid fevers, with things added to reſiſt malignity, ſuch as we ſhewed in malignant fevers, that ſend out Small-Pox and Meazles.

We alſo provoke Urin and Swear, as in others.

We alſo uſe Alterers, adding to Coolers, reſiſters of Corruption, and Cordials, as ſharp things, and external applications.

We keep up the ſtrength by Diet and Cordials, and more in theſe malignant than in other fevers, therefore allow a little ſharp Wine ſomtimes to refreſh.

We correct accidents as formerly ſhewed.

The Peſtilent Fever, or the Plague being a contagious Diſeaſe proceeding from an external venemous quality, paſſing from body to body, by the touch, or by the Air. We ſhal ſhew how to preſerve the ſound, and cure the ſick.

Preſerva-

The preventing and cure of the Plague.

Preservation is made by declining the external Cause, or correcting it, or preparing the body to prevent Infection. albeit the seeds of the Plague are hidden and pierce into the body unknown to us.

We decline the Cause, by avoiding the place where the Plague is, as far as our calling, piety, and honesty wil permit, and the Garments and cloaths infected, the Houses and Streets, and in regard we know not where it is, many carrying the seeds of it with them, that are not infected, we avoid the concourse of people in publique meetings, Bathes, and Danciug-meetings. And because infection may be conveighed by dead and liviug creatures, it is good to go quickly far off, and return at leasure.

We amend the pestilent cause to keep it from infection, or to remove it, by Ayring and washing of coaths infected; some wil wash their money at such a time, before they receive it.

Others that think the infection of the Air is the cause of the Plague, amend that, which we approve, though we say the seeds of the Plague are in the bodies and not in the Air: for some things that purifie the Air purifie the Body, and the Air is often the conveigher of the Plague from one body to another. This is done diversly, first we remove all putrid and corrupt things that may infect the Air. Some perswade themselves, that the scent of and old Goat evening and morning, prevents the Plague. And therefore they bring up Goats in the stable among Horses, who use to have a kind of Plague, and the stink of the Goats frights away Mice also from those places.

It is good to let in pure Air that is dry, and keep out ill. They say Sparrows and other Birds kept in a Chamber, purge the Air, and that Birds will not stay about infected places. Also good fire purges the Air by which *Hippocrates* stopt it.

Also Fumes of any scents correct the Air, as Juniper, Savine that beareth berries, or Bayes, Rosemary, or Agnus Castus. Or make fires of Oak, Vine, Oliers, with Rue and Juniper.

Some burn Juniper berries upon Coals, Mastich, Frankincense, Amber, Cloves.

Or these troches. Take *Benzoin and Storax, each half an ounce*; *Juniper or Berry-bearing Savin a dram, Angelica roots a scruple*, with *Gum-traganth* infused in *Rose-water* and a little *Musk*, make *Troches* for a *fume*.

Or these Candles which smaok. Take *Myrrh and Frankincense, each two drams*; *Benzoin, Storax, each three drams*; *Labdanum a dram and an half, Amber half a dram, Juniper berries two drams, dried Pomegranate peels a dram, Citron peels and Sanders, each half a dram*: *Juniper a dram, Wood Aloes and Cloves, each a scruple*; *Char-coals made of Willow or Tile tree as much again as all the rest, with Infusion of Gum traganth and six grains of Musk* make black *Candles*.

Perfumes not burnt are thus made. Smel to Rue, Citrons, Lemons, Orenges, or a spunge or rag dipt in Vinegar and Rose or Rue water.

Or thus. Take *bruised Rue a pugil*, and with *Vinegar* take out the *juyce*, add *Angelica roots half a dram, Camphire and Saffron, each half a scruple*; with a *Spunge* as before.

Or this Balsom, to anoynt the Nostrils or Lip, made of Oyl of the seeds or roots of Angelica drawn with with Wax.

It is good to carry sweet Apples or Balls in the hand. Take *roots of Angelica and Myrrhis, each two drams*; *Zedoary half a dram, red Roses a dram, Lavender half a dram, Angelica, Nigella, and Coriander seeds, each a scruple*; *seeds of Basil half a scruple, dried Citron peels two scruples, Nutmeg and Cloves, each half a dram*; *Cinnamon, Wood Aloes, Juniper and Storax, each half an ounce*; *Benzoin two drams, Myrrh a dram, Camphire six grains*, with the *Infusion of Gum traganth made in Rose or Angelica water*, make a *Ball*, and add a little *Oyl of Cloves or of Angelica seed*, and roul it over with a little muskefied piece of Silk or Cotton.

It is good to wash the Face, Hands, Armholes, Privities, with *Vinegar of Roses, or Rose-angelica, or Lavender water, with a little Camphire, or the water of Citrangle flowers called* Aqua Natie.

Droetus drops perfumed distilled waters into the Ears And perfumes the Garments, and adviseth perfumed Gloves or Bags in the bosome, of *Ciprus* and *Violets* in *Pouder*.

Or thus. Take *roots of Angelica half an ounce, Orris roots two drams, Coriander seeds, Juniper, each a dram*: *Benzoin and Storax, each two drams*; with *Musk* or *Amber* if you please, make a *Pouder*.

We preserve the body by keeping the humors from violent motion and inflammation, and by avoiding repletion and impurity, with Antidotes.

Let men take heed of inflammations at the time of the Plague, which wil soon receive a Fever or malignity.

Let them take heed of too hot Air, as Baths by which many have been infected.

And of violent motion by Running, Leaping, or Dauncing, and of violent passions as Anger, Joy, &c.

And of hot meats and Wines immoderately taken, but let them be corrected with cold sharp things.

It is naught to stir the humors, for then they are sooner infected by external causes. And Fear causeth the Infection to seize upon men sooner than when the mind is quiet. Also Venery is denied by reason of the imagination. Also much unseasonable bleeding.

All Repletion is forbidden, for though every body is capable of the Plague, yet plethorick and cacochymical are sooneſt infected: Therefore keep the body clean, and clense it if it be foul.

Thus Blood-letting is good in men, if the body be plethorick, though it must not be done rashly in young men who are subject to the Plague most, lest the humors be disturbed.

If ill humors abound, give a Clyster every other day.

In Cacochymicks purge, but trouble not the humors too much, but use gentle things, accustomed in Spring and Fall after preparation of the humors abounding, adding things that resist the Plague and putrefaction.

Pils are best that have Aloes called pestilential Pils of *Ruffus* the Author of them. They are thus made right. Take *Aloes, Ammoniacum, Myrrh, equal parts*, with *sweet Wine* make *Pills*.

Since, they make them thus. Take *Aloes a dram, Myrrh and Saffron each half a dram*: with *Wine* or for hot natures with *Syrup of Lemmons* make *Pills*, to which you may add divers *Antidotes*.

As these that are good to open obstructions in the Meseraicks. Take *Extract of Gentian a dram, the lesser Centory and Carduus, each half a dram*; *Rue, Wormwood, each a scruple*: *Pouder of lesser Centaury four scruples*; *Troches of Myrrh a dram and an half, Troches of Eupatory and Capars, each a dram*: *Troches of Wormwood half a dram*, with *Elixir of propriety* make a *Mass*, give *a dram* twice in a week.

These Purge more: Take *Aloes two drams, Rhubarb,*

Myrrh, each a dram; Zedoary, Saffron, each a ſcruple; with juyce of Citrons, or Limons: make a Maſs for Pills.

Or: Take *Aloes three drams, Rhubarb in pouder and ſprinkled with Cinnamon water one dram and an half, Agarick in Troches a dram, of the beſt Myrrh and Gum Ammoniack, diſſolved in Vinegar, each two drams; Saffron half a dram, Camphire a ſcruple, Oyl of the roots of Maſterwort two drops, with Vinegar*: make Pills.

Theſe may be uſed twice or thrice in a Week half a dram or a ſcruple, made into two Pills, the one at night and the other in the morning, they may be given to Children, if they can ſwallow them.

Theſe are ſtronger that follow to be given in foul bodies and ſeldomer: Take *the former maſs, with Agarick or Rhubarb*, add *Aggregative pills a dram, Diagridium a ſcruple, with ſyrup of Roſes*: make Pills.

The Antients gave Pills of Turpentine inſtead of Ruffi, And we give Roſin of the Larch tree, which purgeth very wel: Thus, Take *Turpentine Roſin, or Laricea* boyled, that it may be poudered, *Rhubarb ſprinkled with Cinnamon water, each two drams; Turbith a dram, Ginger half a ſcruple, with pouder of Liquoriſh*, make a Maſs, give *a dram or more*, as you deſire to Purge.

A dram of Turpentine, diſſolved with the yolk of an Egg and Carduus water purgeth well.

Divers Potions alſo may be made for the ſame: As, Take *Triphera Perſica* (commended by *Meſue*) *from half an ounce to ſix drams, with Scabious, Carduus and Sorrel water*, mix it, and give the ſame every fifth day.

You may give infants Manna in broath or Rhubarb, thus, Take *the extract of Rhubarb, with juyce of Roſes and Sugar and Sorrel water*, make Lozenges. *Droetus* makes candied Rhubarb for Children.

There are many Antidotes mixt with Rhubarb and Triphera.

In very foul bodies give ſtronge purgers of Diagridium, Coloquintida, roots of wild Cucumber, Armenian Earth, Stibium.

As this pouder: Take *the Troches of Alhandal, Diagrydium, Turbith, each a dram; Euphorbium a ſcruple, Maſtick half a dram, Saffron a ſcruple, Snake weed roots, and Burnet, each half a ſcruple*, make a Pouder, *take half a dram*, in convenient Liquor.

Or this Electuary: Take *wild Cucumber roots, Smallage, Coriander and Houſleek with Honey and Pepper*: make an Electuary, give as much as a ſmal Nut. This is highly commended of *Honoratus Caſtellanus* for preventing and curing the Plague.

As the true nature of venom of the plague is yet unfound, ſo is the true Antidote, but experience hath found out more then reaſon. Therefore we give that which is good againſt poyſon in general: The chief and approved ſhall be ſet down. Either as they are eaten, chewed or applied to the pulſes or Heart, or uſed as Amulets.

Of Antidotes taken in, they are either very hot, or leſs hot, or cold, rather then temperate, given with regard to the conſtitution and Age, and the hotteſt are not to be given raſhly as Euphorbium and Aqua vitæ which prooves water of death ſomtimes to young people: ſome are given in a liquid form to drink, as this Decoction. Take *roots of Tormentil and Burnet, each an ounce; roots of Valerian half an ounce, roots of Elicampane and Angelica, of each two drams; of Galega leaves called Goats Rue, and Sanguiſorba, each a handful*: boyl them in Wine and Water, add *a little Vinegar and Saffron.*

Or this infuſion in Wine, to take away ill taſt. Take *roots of Tormentil, Dittany, Endive, Burnet, each an ounce and half, Valerian, Maſterwort and Angelica roots, each an ounce, Snake weed and Gentian roots each half an ounce; leaves of Carduus and Coriander ſeeds each a dram, Cinnamon three drams*, ſlice and infuſe them in four Wine or white Wine and Vinegar, drink every morning often hereof.

Sheeps Milk drunk faſting, is an Antidote commended.

Presbyter Veſantinus Ydeleyus, that often attended in Plague times, in his book of the Plague, highly commends the drinking of a mans own Piſs, in a morning faſting; and inſtead thereof the Chymiſts have a Balſome of Urin more pleaſant.

In Sawces and Sallats uſe fowre Herbs and Juyces, as Vinegar, Citron juyce, Ribes, green Grapes, Peaches, Cherries, Prunes, Apples.

Alſo the juyce of Clove-gelli-flowers, or Vinegar thereof juyce of Goats Rue, with Treacle, according to *Mathiolus*, juyce of Vervain, with Wine or Broath, and juyce of Onyons, are given divers waies.

It is good to have things by, that will laſt in time of Plague, at hand.

As Inſpiſſate juyces, called *Rob* by the *Arabians*, or extracts by us, as of Carduus, Vervain, alſo the extract of Juniper is good and uſual, Infants may take it, it is ſo pleaſant.

And Syrups with Sugar, thus. Take *Vervain, Scabious, Goats Rue, each a handful; Juniper berries a pugil*: boyl them in water and a little Vinegar and with Sugar, make a Syrup.

Alſo Conſerves, or Preſerves, or dryed and candied with Sugar, Honey, Vinegar and Salt may be kept.

As Zedoary ſliced and eaten in the morning or drunk with Wine.

Or Cloves ſteep'd in Vinegar.

Citrons or Oranges candied,

Or Vervain eaten in the morning.

Roots of Tormentil with Harts-horn and Vinegar or candied with Sugar, and Burnet.

Alſo Sorrel, Bugloſs, Borage and roots of Moulin are ſo prepared.

Alſo roots of Butter-bur, ſteep'd in Vinegar, and roots of Myrrhis and Juniper berries ſteeped in Vinegar.

Or thus mixed: Take *Rue, Sage, Plantane, Bay-berries*, ſtamp them with Vinegar, eat a ſpoonful every morning with a little Bole Armenick.

The Antidote of Nuts is thus made, for the whol Family. Take *Nut kernels, Rue leaves and juniper-berries*, ſtamp them with Vinegar.

Another commended made by *Apolonius*, or by *Mithridates*: Take *four ounces of Nut kernels, three ounces of Figs, dried Rue two drams, with Vinegar and Salt, or Honey*, if they have ſweet things mix them.

A greater Compoſition thus. Add to the former, *Tormentil and Burnet, each half an ounce; Bole Ammoniack prepared ſix drams, Saffron a ſcruple, with Vinegar, Salt and Honey*. You may add alſo ſome of the following Pouders, and Mirrh.

We make divers confections of pouders and all the reſt into Lozenges for Antidotes. Theſe are either temperate or more pleaſant, or unpleaſant, bitter and ſtupifying.

The temperate confections are for Infants, Women with Child and dainty Perſons, they move not the body, and hurt not by long uſe.

As Diamargariton frigid, the cordial Electuary of

Nuts

Nuts and Angelica Confection of Hyacinth made by *Falcon* against the plague. Also Bezoartick pouders. The Chymist extol the specifical Elixir pestilentiall of *Crollius*, also the Gold spirit of Life made with Camphire. Thus made: Take *of the best spirit of Wine a pint, Camphire eight drams*, if chosen in Summer, *ten* in Winter dissolve it in the spirit of Wine, and hang in it after *Saffron half a scruple*, give a spoonful every morning.

This confection is also good against Worms: Take *of Bole Armenick prepared, with juyce of Lemons two drams, shaving of Harts horn half a dram, Citron seeds peel'd a scruple, Tormentil roots a dram, Diamargariton frigid half a dram, Sugar dissolved in Sorrel and Purslane water*, make Lozenges, *or with Syrup or Honey* an Electuary.

Another Composition: Take *Citron and Sorrel seeds, each a dram, Basil seed a scruple, Tormentil roots a dram and an half, Angelica roots half a dram, Bole prepared two drams, Coral half a dram, Pearl a scruple, shavings of Ivory a scruple, Smaragds and Hyacinths, each half a scruple; Cinnamon a dram, all the Sanders half a dram, Sugar six drams*: make a Pouder, or dissolve *the Sugar*, and make Lozenges, or an Electuary.

I made in the year 1593. in the Plague time a stronger Pouder, thus: Take *Bole prepared half an ounce, Coral two drams, Amber a dram and an half, Ivory and Hearts horn, each half a dram; Tormentil roots a dram and an half; roots of Dittany, Carline, Burnet, Angelica, Master-wort, Myrrh, each a dram; of round Birth-wort, Zedoary, Limon peels, Cloves, each half a dram, Cinnamon two drams, Sorrel seeds a dram, Carduus, Angelica, Bazil and Coriander seeds, each half a dram; Citron seeds a scruple, Saffron half a scruple, red Roses, Vervain, Rue, Scordium, Carduus, each half a dram; Goats Rue a dram, Species Diamargariton frigid a dram*, make a Pouder, give *a dram with an ounce of Sugar*, in any form. If you add *of Camphire* to these pouders, about *a dram*, they will be stronger, but not so fit for Women with Child and Children.

Musk and Amber-greece are Cordials and perfume the rest.

For Infants these simples troches: Take *roots of Angelica half a dram, Bole prepared with juyce of Lemons half an ounce with Musk, Sugar* and the infusion of *Gum-Traganth*: make Troches.

A Compound Pouder with Musk. Take *roots of Angelica, Myrrh, Master-wort, each two drams; roots of Tormentil, Burnet, Dittany, Scorzonera, Vincetoxicon, Crosswort, Devils bit, Elecampane, Zedoary, Galangal, each a dram, roots of Birth-wort, Gentian, Cuckowpints, or Dragons, each half a dram, all the Sanders a dram, Cinnamon two drams, wood Aloes half a dram, Carduus, Scordium, Balm, Sage, each a dram; Rue half a dram, Scabious, Vervaine, Sorrel, Lysimachia, Cordial flowers, each a dram; seeds of Sorrel, Fennel, Carduus, Coriander, each a dram; Citron and Basil seeds, each half a dram; Juniper and Bayberries, each two drams; Nutmeg and Mace, each half a dram; Amber three drams, Ivory and Harts horne, of each a dram, Unicornes horn a scruple, precious Stones a dram, Bezoard stone, Pearl, each a scruple; Bole prepared half an ounce, Coral half a dram, Musk and Amber-greece, of each half a scruple, Camphire* (but it overcomes the sent of the Musk) *a scruple*, make a Pouder, and to *a dram* put *an ounce of Sugar*, and give it in any form.

These are unpleasant but profitable, made of Mirrh, Aloes and Castor, and best in Pills.

This following pouder is called the King of *Spaines*. Take *Myrrh, Mastick, Bole, sealed Earth, wood Aloes, Cloves, Mace, Saffron, each equal parts*: make a Pouder take it every morning.

Another: Take *Sorrel seeds two drams, Citron seeds a scruple, Tormentil roots a dram and an half, Bole prepared three drams, Aloes washt, Myrrh, red Coral, each a dram; dryed Citron peels Cloves and Cinnamon, each half a dram; Saffron half a scruple, species of Diamargariton frigid and Trionsantalon, each half a dram*: make a Pouder.

Castor is somtimes added to great Compositions and in a smal quantity by reason of the scent.

Antidotes made of Opium are to be taken in smal quantity.

As Treacle, Methridate, and *Mathiolus* his great Antidote.

Also the Electuary of the Egg, thus, better made to prevent burning of it. Take *the yolk of a hard Egg*, add as much *Saffron in weight*, beat them together, adding *the pouder of Tormentil and Dittany roots, of each half an ounce; Angelica roots an ounce, roots of Vincetoxicum or Swallow-wort, Devils bit, Zedoary, each two drams; Rocket seed a dram, Mirrh a scruple, with Treacle and Mithridate*, make a Mass, give *a dram* with *Water, Wine, and Vinegar*.

In the year 1582. this was our Electuary which was very successful. Take *roots of Angelica, Master-wort, of each two drams; of Tormentil, Carline, Swallow-wort, Burnet, Devils bit, Valerian, each a dram; Zedoary half a dram, juniper berries two drams, Bay-berries a dram, Angelica, Sorrel, Carduus seeds, of each a dram; Citron seeds half a dram, Rue, Carduus, each a dram; Saffron, Pepper, Mace, each half a dram, Hearts horn and Ivory, each a dram; Bole prepared with juyce of Citrons half an ounce, Opium a scruple, Camphire half a scruple, Nut kernels, Figs, each half an ounce; fine Sugar two ounces, Honey twelve ounces*; make an Electuary, or Lozenges, give *a dram* with *an ounce and an half of Sugar*.

These aforesaid are taken alone or with other.

Of Mithridate these are usual Lozenges. Take *Mithridate half an ounce, Sugar and Sugar candy, each four ounces; with Spanish wine*, make them up.

Or this Electuary: Take *the best Treacle three ounces, Tormentil roots, juniper-berries, Carduus and Sorrel seed, of each two drams; Bole prepared half an ounce, Ivory a dram, Coral a dram and an half, species Diamargarit frigid a dram, with syrup of Citrons*: make an Electuary, give it alone or with *Wine* or *fit Waters*.

If Treacle be added these aforesaid are Opiats.

Stilled waters are Antidotes and expel and provoke swear, In the Cure of the Plague we shall declare those that preserve or Cure, or both.

Some things may be held in the Mouth to preserve, because its thought the Plague is taken by the breath, when we go forth into suspected places.

As Angelica root which is well sented, and Zedoary, roots of Elicampane, Galangal, Citron rind or Orange peels or seeds, or Fennel seed. We shall not advise things without scent, as Vervain which is commended highly, five leaved Grass, nor unpleasant things which cannot be long held in the Mouth.

For to be held in the mouth are Troches made; Thus, Take *Angelica roots two drams, Orris roots a dram, Zedoary half a dram, dried Citron peels, Coriander seed, each half a dram; Cloves, Nutmeg, yellow Sanders, each a dram; Cinnamon two scruples, Bole prepared with juyce of Lemmons or Vinegar a dram and an half, Sugar six drams*: with the *Infusion of Gum traganth in Rose-water* and a *grain or two of Musk or Amber-greece* make *Troches*.

Others easier made and pleasant. Take *Angelica roots one dram, Juniper half a dram, Wood Aloes a scruple, Sugar half an ounce*: with *Infusion* of *Musk* make *Troches*.

The Angelical Balls of *Percovius* are made thus.

Take

Take *red Coral and burnt Hearts-horn prepared with juyce of Scordium, each an ounce: Sugar dissolved in Scordium water two pound, the distilled Oyl of Angelica half a dram.*

Some only chew Myrrh, troches of Musk are made only of Bole, and Sugar, and Musk.

External Remedies are applied to divers parts, especially to the Heart and Pulses which are good before the Heart be smote, or in a Fever. Therefore it is guarded with Cordials and Poysons also, as they say, one poyson expels another.

Cordial Applications are best in a bagg, or Oyntments for Epithems dry quickly.

Make a Bag thus. Take *Cordial flowers, each a pugil; Rosemary flowers half a pugil, Scordium, Marjoram, Balm, each a handful; Angelica roots, half an ounce, dried Citron peels two drams, Orris roots a dram, Sorrel and Coriander seeds, each two drams; Basil seed a dram, Citron seeds, yellow Sanders, Nutmegs, Mace, Wood Aloes, each half a dram; Saffron a scruple*: make a *Pouder*, bast it with *Cotton* in a *fine cloth* or *silk* for a *Bag*. add *Musk* or *Amber-greece*.

Anoynt or bathe the Heart, and Pulses, and Nostrils, with this. Take *Angelica roots half an ounce, cordial flowers and clove Gilliflowers, each a pugil; citron peels six drams, Saffron, Camphire, each a dram: Balm and Cardiaca, each a handful; Treacle two drams*, add *Rose-water* and *Vinegar*.

Or with this Liniment. Take *the best Treacle two drams, of the yellow Ointment of Water-lillies three drams, Cordial species half a dram, with juyce of Lemmons*.

Or with this sweet Balsom. Take *distilled Oyl of Cloves and seeds or roots of Angelica five drops*: with *white Wax* and a little *Mosch*, Anoynt.

Or with this. Take *juyce of Cardiaca and Balm, each two drams; dissolved Camphyre in Aqua vitæ half a dram, Saffron a scruple*: with *Honey* make a *Liniment* for the *Pulses*.

Not only Empericks, but some learned men commend highly some poysons to be applied to the Heart, to defend it from the Plague.

Mathiolus highly extols Oyl of Scorpions, thus easily made. Take *two drams of right Oyl of Scorpions, with Treacle a dram*: apply them to the *Pulses* with a *clout*.

Some add Rhubarb, as the Oyl of Scorpions of *Clements*.

Some commend this of Arsnic. Take *white and red Arsnic, each equal parts*: make a *Pouder*, add the *white of an Egg* or *Mucilage of Traganth* to make a hard *Cake*, which must be carried about the Heart in a double Scarff.

Somtimes Arsnic is mixed with cordial Pouders thus. Take *fragments of precious stones, coral, Pearl, and Hearts-horn, each a dram; Orris half an ounce, Saffron a scruple, white Arsnic an ounce, Orpiment half an ounce*: make a *Pouder* for a *Bag* with a little *Ambergreece*.

Some do mix with good success two ounces of the Pouder of a Toad.

If the Liver be anoynted with Oyntments that cool and strengthen, some think the body is safer from the plague.

Some hold it for a great secret to anoynt the Emunctuaries, as the Arm-holes and Groins with Benzoin, Storax, Labdanum and Litharge.

Also to keep open old Ulcers, is good in time of plague to preserve.

And an Issue in the Arm or Legg.

In the year 1564. a Monke at *Leyden* in time of the plague had a hole in his Cod with an Hellebore root, kept open by which he preserved himself, and perswaded others to use the same for safety.

Amulets are highly esteemed, a Nut-shel filled with Quick-silver, stopped and hanged about the Neck. This is commended by *Marsilius Ficinus* by many examples, and by others, some say it must touch the region of the Heart.

They think Saphires, Smarradgs, Hyacinths, Unicorns horn, and Ivory about the Neck do the same.

Also Five-leav'd grass and Dittany roots, and Bettony with the roots held in the hand.

The Cure of a pestilential fever is divers according to the humor they suppose it comes from, which they evacuate: But we say it came from a pestiferous quality infecting the body, and therefore aim at the opposing and altering that, considering the age of the Person.

First we give a prognostick because all Plagues are dangerous, and more die than live, In which there is no hope, and the Physitian labors in vain, except in the space of twenty four hours Nature throws all or most part of the poyson from the Heart. Spots are deadly when they appear, because they are not critical. Buboes and Carbuncles appearing give hopes of recovery. Sudden loss of strength, especially Swounding and outward cold are evil signs. If a woman with child having the Plague, miscarry, as shee commonly doth shee dieth usually.

The Cure is by Nature and the Physitians help, for many do recover. Therefore we strike at the Disease, keep up strength, and correct symptoms.

We said the Disease was a venemous quality fixed in the Heart, and so upon the whol body in the similar parts, with a preternatural heat and fever. Therefore we first labor to take away this quality from the Heart, and the humors which increase the same. And to alter the venemous force thereof and abate the heat.

Things that evacuate this poyson, and put it from the heart, and expel the humors that increase the fever must be used in this order and manner.

Blood-letting was the first and usual means. And many perswaded themselves that much poyson was taken from the the heart thereby. But it is a general rule that it must not be til ripe age. And in women with Child not so much as in the Foot, for fear of miscarrying: for others, I cannot perceive how bleeding can take the Venom from the heart or body when it is not conteined in the blood: but it rather is a cause of drawing the Plague more inwardly the Veins being emptied. Besides, the motion of nature is hindered thereby, which at first labors by Swear, and Pustles, and swellings to expel it. And the strength which should be kept to encounter with the Disease is lost. Neither doth it bring so much good as hurt, for taking away the cause or cooling the heat which is not very great in the Plague, for the reasons aforesaid. Therefore they are all to be blamed that observe not these circumstances, but let blood rashly, except in Children, though Nature be laboring to sweat it forth, or cast out Botches: and though they see many die after bleeding, they wil go on their road of bleeding presently and plentifully. But we are to bleed only when the Plague is in a plethorick or cachectick body, which causeth not a simple fever by plenty of blood, but a putrid Synoch, and then the heat and symptoms wil be abated. And then it must be sparingly done to preserve strength, and not at all except the repletion mentioned require it, if there be weakness. For we have often found by experience that more people in yeers have scaped that were not blooded,

blooded, than that were. Some approve no bleeding, but such as is til the Patient fainteth, and brag of many that have been cured thereby.

We think it safer to omit it, than rashly to use it: and if it doth good, it is more for the fever than the venemous quality, which is not in the blood, but comes to the heart from without, and so cannot be expel'd by bleeding. The time if it must be, is at first, within twenty four hours, or not at all. And if sweat appear as usualy it doth, it must be defer'd til it be past: and it must not be stop'd either by bleeding or nakedness, which is required when the Vein is opened. But when sweat is past and the Patient is refreshed with meat or medicine, it may be done if need require, or before sweat if it appear not: nor must we stay to loosen the body first, as at other times before bleeding, for there is no dallying. If pain be, take blood from the side, if not take the common Vein. Open the *Saphena* or Vein in the Foot if there be a swelling in the groyn. If it be above, open the Arm or Hand-vein on that side. If under the Arm-holes, open the Basilick vein, if under the Ears the Head vein, if in the Face, under the Tongue. Some clap on Cupping-glasses to the Carbuncles before bleeding, that the venom sent thither may stay there, and be drawn inward by bleeding, by which way we have known bleeding do much hurt. And I have observed that Empericks have with very ill success raised blisters with Vesicatories upon the Botches at first appearance. Some do draw the venom out at the orifice, after bleeding apply Scordium or Jack of the hedg, which is of the same nature, others apply living Oysters for the same.

In yong people Cupping-glasses are instead of bleeding, and they are better for old than bleeding with the Lancet, which weakens and draws in the venom, if they are applied at first to help nature to drive out the venom, when she is in motion with sweat; and in those places where nature expels, as when a pestilent sign is above, to the Neck and Shoulders, when in the Groyns, to the Buttocks, Thighs and Hands.

Scarification before Cupping in the same places, draws outward more powerfully, and because the superficial blood is only taken away, thereby doth it weaken or hinder Natures motion.

Horsleeches may be instead thereof applied to the same parts.

A Vesicatory to the great Toe or Ring-finger made of Crowfoot or Flammula deriveth the Venom, and the more if it be kept open with a Thred and Beet or Colewort leaf, or anoynted with Butter.

A quick Pidgeon cut in two, and bound to the soles of the feet, or a Tench, or a bruised Radish, or Nettles with the roots, or Ground-Ivy bruised doth the same.

Some commend a live Pigeon opened and laid hot to the Head.

In the yeer 1584. in plague-time, I observed that a Cock pluckt at the Rump, and his feet bound close together, and his mouth stopt with the hand of a man, was applied to the Heart, with admirable success.

Evacuation made by sweat or insensible transpiration, draws the venom from the Heart, or outwardly to the superficies, and is the chief way of Cure. This Nature at first doth endeavor for the most part. And the Physitian must help her motion, or provoke her to it.

This is done somtimes by things given inward, somtimes by Fumes or Frictions, by sweating medicines, and by Blysters, and by things that experience teacheth us do resist poyson. These are called expelling medicines, and are of divers forms.

These must be used at the first, and if possible before the Venom strike the Heart and beat it down, which it doth suddenly if not resisted and expelled with the spirits and heat outwardly, the sooner the better, for it is the Key of the work, and if it be not done in twenty four hours (in which time the Plague somtimes killeth) what is done after wil signifie nothing, and except Nature of her self do it we shal labour in vain, after this opportunity is neglected. Neither ought bleeding or purging (though required) hinder this; although some perswade to sweat after bleeding, and if the Physitian come after it may be done, but not so wel, and repeated the next day, and all the time of the Disease if strength hold and Nature offer to discharge that way. The Patient must not be forced much to sweat, except Nature tend that way; for the Venom of the Plague may be carried away by insensible transpiration without sweating.

They are in divers forms, but the moist is best, as a Decoction, or Water, or Infusion, or Potion, or you may give an Electuary.

A simple Decoction, or a common Decoction used in the smal pox to drive them out as is there mentioned may be given here.

For Children. Take *Pease and Barley, each a pugil*; *Figs ten, Dates five, Tormentil and Dittany roots, each a dram*; boyl them, add a little *Wine*, give it.

Or a Decoction of *Tormentil, Dittany, Angelica, Burdock, Butter-bur or Celandine roots.*

Or of *Sorrel, Plantane, Tansie, Vervain, Scordium, Rue in Water and Vinegar, or Wine and distilled Water.*

Or *Garlick* boyled in *Honey'd water* to *two ounces*, which wil cause *sweat* and *Urin.*

Also this Decoction of Lignum vitæ. Take *Guajacum two ounces, Sarsaparilla an ounce, Juniper and Bayberries, roots of Angelica and Elicampane, each two drams; with a little Cinnamon.*

Juyces are not given alone, but mixed with other things, yet *Rondoletius* saith that *three ounces of the juyce of Marygolds* is excellent.

The best distilled Waters are, that *of Orange flowers*, and of *juyce or flowers of Limons.* Also *Angelica water with Aqua vitæ* produceth *sweat* violently to my knowledge, or *water of Citron leaves*, and *Aqua vitæ*, and to chew them is a good *Antidote.* And 1534. I never used other when I visited my Patients of the plague.

Also *Distilled water of Oak leaves, wild Vetches, Sorrel, Burnet, Tormentil, Dragons.*

Also Celondine boyled in Wine and Vinegar.

Or this. Take *Burdock roots a pound, of the inward bark of an Ash two handful*, distil them, give *three ounces.*

Also *Water of green Nuts.*

Or this. Take *Sorrel, Scabious, Vervain, Rue*, (not ful ripe) *each a handful*; *Nightshade and Housleek, each half a handful*; cut them small, distill them. And if you add *Vinegar* before stilling, it wil cause Vomit, but Sweat howsoever.

Or, Take *Limons ten*, cut them, add *Borage and Sorrel, each two or three handful*; *white Wine three pints*, distil them, give *two ounces.*

The first choise Water: Take *Angelica roots, Master-wort, Tormentil, Valerian and Dittany, Devils bit, Burnet and Snake weed roots, each an ounce*; *Vervaine and Scabious, each a handful*; distil them in *Aqua vitæ* or *strong Wine*, give *an ounce.*

The second: Take *Rue, Marigolds, Sage, Vervain, Scabious, each a handful*; *Burdock and Devils bit roots*; *each*

two ounces; diſtill them in *white Wine*, give *an ounce*.

The third: Take *Guajacum half a pound, roots of Angelica, Maſter-wort, Gentian, of each an ounce; Orris and Zedoary, each half an ounce; Carduus, Rue, Scordium, each two handfuls, Baſil a handful, Lemons ſliced ſix*: diſtil them thrice, give *half an ounce*.

The fourth, which I have often uſed ſucceſsfully: Take *roots of Valerian, five leaved Graſs, white Dittany, Smallage, Burnet, Dragons, Tormentil, each an ounce; Gentian half an ounce, Dane-wort, Birth-wort, Angelica roots, of each two drams; Galangal ſix drams, Valerian, Smallage, and Celandine, each a handful; Rue half a handful, Bay and juniper-berries, each half an ounce; wood Aloes two drams, Cinnamon ſix drams*: cut and bruiſe them, diſtill them in *Aqua vitæ, Borage, Bugloſs, Sorrel and Scabious water*, give *two ounces*.

The fifth: Take *Tormentil, Burnet, Dittany, Swallow-wort, five leaved Graſs, Burdock, Butter-bur and Devils bit, of all the roots, each an ounce; roots of Angelica, Maſter-wort, Elicampane, Mockbervil, Valerian, each half an ounce; roots of Gentian, Birth-wort, each three drams; Zedoary, Galangal, Ginger, each two drams; roots of Dragons, Cookowpints, Garlick, Onyons, of each two drams; Laurel bark a dram, Scabious, Vervain, Marigold, Celandine, Willow herb, Scordium, Rue, Tanſey, Sage, Balm, Plantane, Pauls Bettony, Carduus, Wormwood, each three drams; flowers of Roſemary, Bugloſs, Borage, Water-lillies, Violets, each a dram; Saffron half a dram, Coriander, Baſil, Citron and Angelica ſeeds, each a dram; Carduus and Sorrel ſeed, each two drams; Bay and Juniper-berries, of each an ounce; Nutmegs, Cloves, Mace, each a dram; Lemons ſliced five, Wall-nut kernels fifteen, Bole prepared an ounce*, cut them ſmal, and cover them with *Wine*, add *two ounces of Roſe-water, and four ounces of Aqua vitæ*: diſtil them, or infuſe them in ſpirit of *Wine*.

Camphire is good if it be added to all theſe waters: diſſolved firſt in *Aqua vitæ*.

And therefore we commend the golden ſpirit of Life with Camphire, above mentioned, for the Cure of the plague.

Treacle alſo and Mithridate, and other Antidotes, as the Electuary of the Egg may be added before you ſtil and then they are Treacle waters.

Thus: Take *the beſt Treacle five ounces, Mirrh an ounce and an half, Saffron half an ounce, Aqua vitæ ten ounces*: diſtil them, give *half an ounce*, with *a drop of ſpirit of Vitriol*.

The ſecond Treacle water approved often: Take *white Onyons ſliced ſix, Garlick picke three heads, Rue, Celandine, Plantane, each a handful, Treacle a dram and an half, Aquæ vitæ two ounces, Vinegar an ounce, Wine two ounces*: diſtill them, give *half an ounce*.

The third made by me for the poor 1594. I uſed few others. and it cured many: Take *roots of Tormentil, Burdock, Valerian, Burnet, Devils bit, each four ounces; roots of Maſter-wort, Angelica, Dittany, Gentian, Dragons all dry, each an ounce; Onyons and Nuts not ripe, each ſix ounces; Rue, Sorrel, Carduus, each two handfuls; Camphire a dram and an half*, diſſolved in *an ounce of Aqua vitæ, Mithridate an ounce and an half, with white Wine, and two ounces of Roſe Vinegar*, draw a Water, give *two ounces*; *with ſyrup of Vinegar or Lemons*, if you pleaſe.

The fourth: Take *Angelica roots two ounces, Zedoary half an ounce, roots of Black-hellebor two drams, Devils bit, Tormentil, Dittany, Carline, Gentian, each an ounce; Treacle four ounces, Green Nuts twenty, water of Pauls Bettony three pints, Vinegar a pint and an half*, diſtil them, give *two ounces and an half*.

Infuſions may be uſed inſtead of waters, and they are ſtronger, you may make them of the things mentioned: Or thus, Take *Camphire half an ounce, white Ginger an ounce, Cloves an ounce and an half, Sugar candy an ounce*, infuſe them in *Aqua vitæ*, give *two drams*.

Another: Take *Mithridate or Treacle two ounces or an ounce of each, Aqua vitæ ten ounces, ſyrup of Lemons or Citrons five ounces*, infuſe them a moneth; or in *Balneo*, give *an ounce*.

The third: *Take* ſpirit of Wine four times diſtilled a pint and an half, Sack two ounces, ſyrup of Lemons or Citrons two ounces, Treacle or Mithridate ten ounces, Angelica roots half an ounce, Zedoary two drams, Camphire a dram, Saffron half a dram, ſpecies Diamargariton frigid a dram and an half, Cinnamon two drams, Musk half a ſcruple, *infuſe them*, give an ounce.

The fourth: *Take* roots of Angelica, Maſterwort and Zedoary, each two drams, wild Angelica, Burnet, Valerian, Swallow-wort, Tormentil, Perſonate, Carline and Elicampane, each three drams: Juniper and Bayberries, each an ounce; Angelica ſeeds a dram, Cinnamon a dram and an half, long Pepper half a ſcruple, Saffron a ſcruple, Mirrh half a dram: *make a Pouder, add* ſpirit of Wine, ſyrup of Lemons, Citrons or Sorrel two ounces, *ſet it in the Sun*, or in *Balneo, give* an ounce, with Treacle, Mithridate, or *Matthiolus* Antidote a dram, *if the Patient be young and lusty give leſs, and diſſolve it with* Marigold water.

Other Pouders above mentioned may be ſo uſed.

Syrups alſo of the Decoctions or Juyces mentioned. Or thus: *Take* roots of Angelica, Tormentil, Dittany, Burnet, Croſs wort, each an ounce; roots of Maſterwort and Zedoary, each half an ounce; Carduus, Vervaine, Rue, Celandine, Marigold, Sage all dry each three drams; Juniper-berries two ounces, Bayberries an ounce and an half, *boyl them in* Wine, *and with* Sugar, *make a ſyrup*: *give* an ounce.

Extracts of Angelica, Vervain, Elicampane and Rob of Elder are commended.

Matthiolus gives a ſcruple of Oyl of Vitriol with proper waters.

Pouders are mixed in potions, or Electuaries, or made into Lozenges for Children.

Theſe may be given to Women with Child: *Take* Angelica roots half a dram, Tormentil and Dittany roots, each an ounce; Treacle half a dram, Diamargariton frigid half a ſcruple, with Sugar, diſſolved in Sorrel water, *make Lozenges, give* two drams.

A pouder for weak perſons: *Take* Tormentil and Butter-bur roots, each half a dram; Diamargariton frigid a ſcruple, *give it with* Sorrel water and ſyrup of Lemons.

A ſecond: *Take* Bole Armenick prepared two drams, Hearts horn a ſcruple, Pearl half a ſcruple, juyce of Lemons two drams: *give it with* Sorrel or Carduus water.

A third, that is bitter: *Take* roots of Tormentil Dittany, Gentian, leaves of Carduus, each half a dram *Bole and Coral prepared, each a dram*; *give it with* Sorrel water.

A fourth: *Take* white Amber and Coral, each half a dram, Pearl a ſcruple, Elkes Hoofe, Ivory, each half a ſcruple: *make a Pouder, give it in* purſlane or Scabious water, *or make Lozenges*.

A fifth unpleaſant: Take *Diamargariton frigid two ſcruples, Harts horn a ſcruple, Baſil ſeed half a ſcruple, Sorrel ſeed a ſcruple, Citron ſeeds ſix grains, Mirrh half a ſcruple with Vinegar*: make a Potion.

Pouders with Camphire are thought to cool: As. Take *Troches of Camphire a dram, ſyrup of Citrons an ounce, with Scabious and Sorrel water*: make a Potion.

Another

Another pouder which cures all Feavers and is good against the Plague, made of hot things, and Camphire. Take *Camphire a dram, Ginger two drams, Sugar candy three drams.* give *a dram with Carduus, Scabious or Marigold water.*

This may be infused alone or with Treacle.

The Italians commend Euphorbium, and make this Pouder: Take *Euphorbium and Mastick, each half a scruple, Saffron five grains, Sugar candy a dram:* make a pouder, give it with *Sorrel water and Vinegar of Roses half an ounce.*

Or thus: Take *Euphorbium, Mastick and Gum Elemni each half a scruple; roots of Tormentil and Angelica, of each half a dram; Camphire half a scruple:* make a pouder, give it with *Sorrel water and Rose Vinegar half an ounce.*

The Chymists commend their Salts and *Crato* also. As *Salt of Angelica, Scabious, Scordium, Carduus, Zedoary, Ash, Guajacum, Wormwood ten or twelve grains, with Conserve of Roses, or Citrons, or a dram of Salt of Polypody in Wine,* it doth wonders.

Also *Salt made of Vine boughs a scruple,* given in *Wine or proper water,* if you take three hours after *a scruple or half a dram of Antidote-Colubrine,* or the like to provoke more sweat.

Crato saith Diasulphur right made, is a strong expeller.

And the Chymists use Antimonium Diaphoreticum but not safely.

Hartman commends his Panacea or sulphure of Antimony fixed, which he teacheth in his Chymical practise.

There are divers Electuaries made of the mentioned things, and may be given to Cure, as well as to prevent. You may make them of the pouders with Honey or Syrup.

The mixture among the preservatives made of roots of wild Cowcumbers with Smallage and Housleek is commended by *Honoratus* and *Crato* for to Cure also.

Opiate Antidotes are good against all poysons and the plague.

Treacle and Mithridate are the old standers a dram at a time, or with Philonium of *Gesner.* The later are Diascordium, *Mathiolus* Antidote, and the Electuary made of an Egg, or Diacroceum.

Or thus first: Take *Treacle or Mithridate, or Electuary of the Egg, or* Mathiolus *Antidote a dram and an half;* dissolve it with the Decoction of *Zedoary,* add *syrup of Vinegar an ounce.*

The second: Take *Treacle a dram, juyce of Scabious, Carduus, each an ounce;* dissolved *in Wine.*

A third: Take *Treacle or Mithridate a dram, Angelica roots, Sorrel seeds and Hearts horn, each a scruple;* give it with *Angelica water.*

A fourth: Take *Treacle two scruples, Pouder of Vervain a dram, Saffron seven grains, water of green Nuts four ounces,* drink it hot, 'tis from *Helidæus.*

A fifth: Take *Treacle a dram, prepared Bole half a dram, Species, Liberantis and Diamarganton frigid, each a scruple; Sorrel, Carduus and Scabious water, each an ounce with half an ounce of syrup of Limons.*

A sixth: Take *Treacle and Mithridate, each half an ounce: Electuary of the Egg two drams, species liberantis a dram, Bole prepared half an ounce:* with *syrup of Sorrel* make an *Electuary,* give *two drams.*

A seventh. Take *Treacle a dram, Vervain half a dram, Saffron and Camphire, each half a scruple;* with *Nut water and Vinegar* make a potion.

An eighth. Take *Treacle three drams, Ginger, Camphire, Sugar candy, each half an ounce;* give *a dram.*

The ninth: Take *Tormentil, Dittany and Angelica roots, each two drams; Zedoary and Gentian, each a dram; Scordium two drams, Vervaine a dram, Ginger, Camphire and Saffron, each half a dram;* make a pouder, add *Treacle and Mithridate, each two ounces;* give *a dram and an half,*

The tenth: Take *an Onyon a little boyled,* steep it in *Vinegar,* and strain it, add *Treacle a dram, syrup of Limons an ounce,* you may add *Garlick* for strong Bodies.

An eleventh: Take *Castor half a scruple, roots of Birthwort, Gentian and Treacle, each half a dram,* give it *with strong Vinegar and Sorrel water.*

A twelfth called *Montpelior* Wolf: Take *juyces of Rue, Sage, Burnet, Centaury, Pennyroyal, Wormwood, Valerian, Mother-wort, green Wall-nuts, each equal parts, Honey half as much as all:* boyl them to a syrup: Take *an ounce thereof to Treacle half an ounce, Bole and sealed Earth, of each two drams; with Vinegar and Wine,* if he be not hot, give it at the first lying down.

A thirteenth: *flower of Brim-stone a scruple, Saffron half a scruple, Frankincense half a dram, Treacle a dram,* give it *with convenient waters.*

A fourteenth: Take *Treacle a dram, Electuary of the Egg half a dram, Oyl of Vitriol seven drops, strong Vinegar an ounce, Sorrel and* Borage *water, each an ounce.*

A fifteenth very hot: Take *Cookow pints or Dragon roots a dram, or each half a dram; Angelica roots a dram, Rue and Vervain, each half a dram; Saffron a scruple, Camphire half a scruple:* make a pouder, give *a dram, with Treacle a dram,* dissolved in *Vinegar and Scabious water.*

A sixteenth of Laurel prepared in Vinegar: Take *of the Saxon Antidote and Treacle, each half a dram,* dissolve it in *Sorrel water with Vinegar of Roses six drams, syrup of Limons half an ounce.*

Some use this Fume to provoke sweat: Take *Sorrel, Rue, Scabious, each a handful, with Aloes, Mirrh, Mastick, Saffron,* steeped in *Water* and *Vinegar,* and sprinkled upon a hot Brick; make a Fume for the whol Body.

A certain physitian to provoke sweat boyled Guajacum, Tormentil, Danewort and Burdock roots and with a little Sublimate Mercury, dipt a sheet in it and wrapt the patient hot therein.

Some sweat with the Fume of Cinnabar or Antimony, as in the pox.

Also Frictions draw forth and cause sweat, or make insensible transpiration. It must be done before sweat appears, it is best with a hand dipt in warm water or with scarlet, and let the body be wel covered and quiet, also Friction is good after spots appear to make them come forth.

Vomiting is also used, when Vomiting is a Symptom especially, and to expel the venom by a violent motion and to cast out the Botch. Some give it at the first, others after a Clyster, or after an Antidote, others give it presently after bleeding, and brag of Miracles.

The gentlest are of loosners and cutters, as syrup of Vinegar, or two ounces of juyce of Erysimum with Scabious, Carduus, or Bugloss water. One saith that he Cured the plague miraculously with water of wood Sorrel, Vinegar and Oyl of Vitriol, others give Asarabacca and an Indian Nut.

The Empericks give the strongest, *Dioetus* writes that a Chirurgion gave a Vomit of Chalcantium prepared presently after bleeding and did wonders.

Mathiolus gives five grains of Stibium with the Electuary Liberantis, and an Emperick did imitate him here in 1564.

Mathiolus

Mathiolus also gives præcipitate in Sugar of Roses.

Or we must give Clysters and purge.

Before bleeding give a Clyster or suppository and it makes an Antidote work better, when no Vein is opened, but a Clyster given. And one brag'd that he cured the plague by only a Clyster, Bleeding and an Antidote. Therefore we usually give Clysters, if the body be not very weak. Because they work speedily and loose no time.

That which clenseth and loosneth is best. As the common Decoction, with Cassia, Catholicon or Tryphera *Crato* gives a Decoction of pauls Bettony with salt-Butter, others add Barley cream to temper the Humors.

Purging doth little because it cannot expel the cause, except nature being at first stir'd up by a strong purge cast some of the Venom out, but that is dangerous because it weakneth, & strength is required to go through it. And because they are subject to a Flux of the Belly and it may carry them away: as one was by stibium given by an Emperick, which he called a present Remedy, who died upon the stool with violent evacuation. Therefore first consider whether the body be clean or foul, if clean purge not rashly, for it wil do hurt if foul, from whnce a putrid Feaver may arise, we may purge, not to expel the venom, but the filth which will cause a Feaver. But have a care of the strength: and defer it to the declination when the state of the Disease is best: if strength be at first, purging may do a little good, except the botch comes forth and commands forbearance, nor must they hinder the chief Medicines which expel, for they must be given first, and nature inclines to that at first. After an hour or two sweating at the first, if strength be good, and we perceive the putrid Feaver to over top the venom, we give a gentle purge to take away filth which will increase the Feaver, that when that is gone, nature may be stronger. Time permits not long preparatives, but all the time we may give altering Medicines to allay the foul Humors and strengthen the Heart: And when the venom is gone and a putrid Feaver remains, we then begin to prepare and purge as in puttrid Feavers.

When need therefore requires, we may give these following, with respect to the Age and constitution. Tryphera persica or Sarracenica a dram, with Sorrel, Scabious or Bugloss water.

Or thus: Take *Yellow and Chebs Myrobalans, each a dram and an half; Tamarinds an ounce, Cordial and Scabious flowers, each a pugil*: boyl them, and add *Rhubarb a dram, Cinnamon half a dram,* strain it, and add *Tryphera persica two drams, syrup of Roses laxative half an ounce.*

It is good to give at first some Ruffi pills, after which I have presently seen the botch appear.

Rhubarb resists venom, therefore we give the extract and *Hartman* saith that many have been preserved by constant use thereof.

We spake of Stibium and Præcipitate among Vomits.

And of Alterers which resist Venom, and drive it out. And of things against putrid fevers. But here we shal choose such which abate heat, resist corruption, and are Cordials, and keep up strength.

Some are given inwardly.

As cold Water in which Harts-horn, Ivory, or Gold is steept or boyled, or Gold quencht in it, is good.

Or a Decoction of Sorrel roots or Tormentil in Water.

Crato commends a Decoction of Groundsel in Ale.

Boyl Sorrel, Borage, Purslane, Scabious, Succory, and Endive in his Broaths.

And put juyce of Limons, Citrons, Oranges, Pomegranats, Vinegar, green Grapes, Barberries in Broath or Drink.

Also Sorrel, Rose and Scabious water.

And divers sharp Syrups prescribed in continual fevers.

For Juleps thus. *Take* syrup of Citrons or Limons, and Sorrel, each two ounces; of Pomegranates an ounce, Sorrel and Bugloss water, each five ounces; *make a* Julep.

A second. *Take* syrup of Ribes or Pomegranate Wine, two ounces, juyce of sharp Apples an ounce, Sorrel, Scabious, Balm and Bugloss water, each four ounces: *make a* Julep.

A third. *Take* juyce of Sorrel, Borage, sweet scenred Apples, Scabious, each an ounce and half; Rose-Vinegar half an ounce, water of Carduus, Roses, and Scordium, each four ounces; *add* Sanders *and* five grains *of* Camphire, *drink it often.*

A fourth. *Take* Rose, Sorrel, and Borage water, each two ounces; Cinnamon water an ounce, white Wine half an ounce, syrup of Citrons or Limons an ounce and an half, Manus Christi with pearls, half an ounce, Bole one dram, Hearts-horn half a dram, *boyl and strain it.*

A scruple or half a dram of *Lapis prunella* is good to be added to these. Or thus, *Take* roots of Tormentil an ounce, Angelica roots half an ounce, Zedoary a dram, Cordial and Scabious flowers, each a pugil; Wood-sorrel a handful, Saunders a dram: *boyl, strain, and add* syrup of Sorrel or Citrons or Limons an ounce. *They add* Unicorns horn *for great people.*

Pouders. the first. *Take* Bole thrice washed in Rose water, and Coral each a dram; Hearts-horn and Ivory each half a dram; Cinnamon half a dram, Manus Christi an ounce: *make a* pouder, *take it in* Broath *or* Wine.

A second, *Take* Confection of Alkermes (*if there be no Looseness*) a scruple, species Diamargariton frigid, Ivory and Hearts-horn, each half a scruple; Bole prepared a scruple, syrup of Limons half an ounce: *with* Sorrel *and* Carduus Water *make a* Cordial potion.

A third. *Take* Confection de Hyacyntho (*which is proper for the Plague*) a scruple, syrup of Limons an ounce: *give it with convenient* Waters.

A fourth. *Take* juyce of scabious and Vervain, each an ounce; syrup of Limons half an ounce, Diamargariton frigid, Electuary of Bole and Gems, each half a scruple; *with* Rose, Bugloss and sorrel water *make a* Potion.

Distilled Waters are also good as, *Take* scabious Balm, sorrel, Vervain, each a handful; Tormentil and Dittany roots, each an ounce; Rose, Violet, Bugloss and scabious flowers, each a pugil; sorrel seeds two drams, Citron seeds half a dram: *boyl them in* Chicken broath, *add* Diamargariton frigid, Electuary of Bole, Gems or Bezoar, each a dram; juyce of Apples three ounces, Cinamon half an ounce, Sanders a dram, *distil in* Balneo, and give it in broath or otherwise.

Another: Take *a Capon prepared,* boyl it, add *half a pound of white bread, two sliced Limons, Borage flowers a pugil, Citron seeds half a dram, Coriander seed a dram, Harts-horn two drams,* pouder them, add *Sack four ounces, Conserve of Cordial flowers, each an ounce*; distil them, give *the water with Cinnamon water, Julep of Roses or Vinegar and Sugar, or alone.*

This restoreth more: Take *a Capon dressed from the fat,* beat his bones, and add *a piece of Veal,* cut them, *and*

and a little Salt, a dram of Diamargariton frigid, conserve of Sorrel, Water-lillies and Bugloss each an ounce; Cinnamon three drams, Rosewater an ounce, Wine an ounce: boyl them to a *Gelly*.

Or thus. Take *a Capon or Hen dressed from the fat*, break and cut it with a *piece of Beef and Veal, with a little Salt, Ginger, and Pepper three corns, a little Marjoram, juyce of Limons, and Wine, each an ounce*; boyl them to a *Gelly*, give it alone, or with other *Broaths*.

Conserve of Roses, Violets, both Buglosses, Water-lillies, Sorrel and clove Gilli-flowers, Scabious, Balm, Rosemary flowers, Plantane, candied Citron peels, sharp fruits preserved and Berries are good.

These are given alone or mixed in a Bolus. every third day we give Mithridate or Treacle in some of those Conserves.

Or with Pouders and Syrups make an Electuary. As, Take *the four cordial Conserves, each an ounce; conserve of Scabious flowers an ounce and an half, Citron peels candied an ounce, Bole prepared a dram, Coral half a dram, Ivory a scruple, red Sanders half a dram, Diamargariton frigid a scruple, bezoard pouder half a scruple, with syrup of Limons*: make an *Electuary*.

Another Cordial. Take *the four cordial conserves of Sorrel, each an ounce and an half; conserve of Balm half an ounce, candied Citron peels an ounce, Bole and Coral prepared, each a dram; Pearl prepared a scruple, Ivory, Unicorn or Harts-horn, each a scruple, seeds of Citrons, Sorrel and Coriander, each half a dram; fragments of precious stones a scruple, Bezoar half a scruple, leaves of Gold ten, Camphire five grains*: make an *Electuary*.

Also Lozenges of Diamargariton, Bezoar and Bole. And give for the Liver, Diatrionsantalon and Diarrhodon.

Or these. Take *red and white Saunders, and Citron seeds, each half a dram; Cinnamon two scruples, Coral, Bole, each a dram; Pearl a scruple, red Coral a scruple, Saphires, Smaragds, Rubies and Granates, each half a scruple, filings of Gold a scruple, Ivory and Harts-horn, each half a scruple*: with *white* Sugar dissolved in the *juyce of Limons* make *Loxenges*.

These are good to be put into Broths when they are almost boyled. Take *Sorrel seeds half an ounce, Melon seeds two drams, Citron seed half a dram, all the Sanders two scruples, Coral a dram and an half, Diamargariton frigid half a dram*, make forms of them.

Pils of the Troches of Camphire, with syrup of Limons are Cordial and do resist Poyson: give two or three.

The Chymists highly commend *Aurum Potabile*, Salt and Magistery of Pearl, and the Tincture of Coral.

Crato gives an ounce of Oyl of Scorpions to the infected.

Divers Applications may be made to the Heart, Liver, Pulses, Reins, Brain and Stomach, and Testicles, and the Air amended.

After sweating lay Epithems to the Heart and Pulses. Thus Sorrel, Scabious, Vervain, Balm, and Rose water, each two ounces; Rose-vinegar an ounce, juyce of Limons half an ounce, Sack an ounce, Sanders, red and white, a dram, Citron peels a scruple, Troches of Camphire a scruple, Diamargariton frigid a dram, *make an* Epithem.

An Oyntment for the the Heart and Pulses, or to be applied twice a day with Scarlet. *Take* Treacle half an ounce, juyce of Limons half an ounce, Rose-vinegar two drams, Camphire a scruple, Saffron half a scruple, Musk three grains.

Or use Vinegar in which Angelica Roots are steeped.

Or this Emplaster. *Take* red Roses poudered; *boyl them well in* Rose-water; with Vinegar, juyce of Apples, Citron peels, Sanders: *make a* Plaster for the Pulses.

Mathiolus anoynts the Pulses with Oyl of Scorpions.

And the Balsom mentioned among the Antidotes is as good.

Or the Bag there mentioned.

Use to cool the Liver cold and strengthening means, as in the cure of putrid Fevers, and to the Reins.

Rose-vinegar to the Head if it be hot.

And to the stomach strengthening Oyntments if it be weak.

And because the Stones have great consent with the principal parts, apply this to moderate the heat. *Take* Rose Water four ounces, Rose Vinegar half an ounce, Sack an ounce, juyce of Pomegranates half an ounce, *wet cloaths therein and apply them*.

It is good to change the Air and place, and remove the Patient from others that are infected and change his shirts, sheets, bed, Pillows, and sprinkle the chamber with Rose Vinegar, Lavender, Rose and Citron water; and in summer, to strew Herbs and Fruit, and to persume as we shewed in the Antidotes.

To keep strength use this Diet.

Contrary to all other acute continual Fevers; Let meat be given often, but little at a time, and they must be compel'd to eat, if they refuse. Let it be of good nourishment, that a little may serve.

As Broath or Chickens, Kid, wood Fowl, Partridg, Veal, and these make divers dishes and Gellies. avoid Eggs which easily corrupt, and fat things. and give fruits, and things allowed in putrid Fevers. and let this meat be eaten with Vinegar or sharp Juyces.

Let the Drink be Juleps mentioned, or Capon Ale, or Broath, or of Veal and Calves feet. Wine temperately taken is allowed.

This is a pleasant Water. *Take* the flesh of the Loyn of Veal half a pound, and a Calfs foot wel clensed, *add* Sugar two ounces, *boyl them in* Water, *add* a dram of gross Cinnamon, *and strain it*.

Let them not sleep while they sweat, some keep them from it twenty four hours after the Botch appears. But in regard sleep refresheth and carrieth the heat outward rather than inward, as I shewed, it must not be hindered.

Let him rejoyce and be in good hope either of Cure or eternal happiness.

The Botch and Carbuncle are the chief symptoms. their cure shal be shewed hereafter, and how the Venom shal be dawn out.

The first thing is to hold up the strength, as we shewed. And if swouning or Heart-beating come, give Cordials, and apply them outwardly. If swouning be from the stomach, anoynt and comfort that. and give a little Wine, or a sop in juyce of Pomegranates-Grapes and Wine, put the Hands and Feet in warm water, and rub the Face and other parts.

Take away Doting and Watching with a puppy applyed, or with Opiates, or washing externally. If sleep be much, use Vinegar of Roses.

Asswage thirst with this Julep. *Take* water newly distilled of Sorrel and Bread, each six ounces; Rose and Scabious water, each four ounces, Vervain and Buglos water, each two ounces: *with* Sugar *make a* Julep.

Or with this. *Take* conserve of Sorrel and Roses, each an ounce; Rob de Ribes an ounce and an half, Diamargariton frigid a dram, with Sugar of Roses *make a* Candy.

If a Diarhæa come it is dangerous, then give a Clyſter of Barley water and Sugar.

And, Take *Tormentil roots half a dram, or Bole with red Wine*, and anoynt the Belly with aſtringents.

Women with Child, do often miſcarry, when they are infected, this is deadly, and to be much regarded.

The other Symptoms, as of the Tongue and Jaws are cured, as in putrid Feavers.

The Cure of venemous Feavers.

The Fevers that come from the biting of venemous beaſts, inflaming the Heart: kil in a few hours, or in the firſt day, except prevented.

The Cure is by drawing the Poyſon forth at the Wound; and by an Antidote, as we ſhewed in Poyſons.

If the Feaver be great uſe Cordials inwardly and outwardly, as I ſhewed to chear the ſpirits.

The Cure of a Hectick fever.

A ſimple Hectick, whether it follow continual Diary, or putrid burning, or intermiting Fevers (not that which is melting and a Symptom of a burning Fever) or free from that Fever which cauſed it: is to be Cured, according as it is either in the beginning, or increaſe, or ſetlement.

In Children and Infants, becauſe their Heart is eaſily altered in temper, it may be ſooner Cured, if not confirmed: but it is difficult in Men and Women. And in old people uncurable.

The cauſe of this diſeaſe is the temperament of the Heart and the whol Body made hotter and dryer, not nouriſhed by a Humor or Excrement, when the Body is freed from the Fever that cauſed it; Therefore purges are needleſs, except the Excrements and Crudities increaſe by long continuance of the Diſeaſe, and then gentle Clyſters or Laxatives may be given. But we muſt chang the temper of the Body, And hold up the ſtrength that decaies, And amend the accidents, if any be.

At the firſt we muſt alter the dryneſs, with moiſtners of the Heart and Limbs, and gentle coolers, becauſe the heat is not violent and may be allay'd by temperate and moderate coolers. Some give Narcoticks or Medicines to cauſe ſleep to cool the Body, but we ſay they are not cold, and rather inflame the Body, as I ſhewed, and therefore give them not but when ſleep is wanting. In the progreſs when the Conſumption is begun we refreſh, with nouriſhers that are moiſt, for they will diſperſe themſelves ſooner through the Body. This is done by internal and external means.

We give them a moiſtning Diet that refreſheth, boyl'd things, moiſten moſt, and roaſted increaſe the radical moiſture more.

Veal, Kid, and Porke, brains of Hogs and Calves are commended.

Alſo the ſtones of beaſts that are not very Lecherous, as of Sheep, Calves, and young Kids.

And Hens fleſh, Capons or Pullets fed with Barley, or crammed with Dow, made up into pills, with Cray-fiſh, Frogs fleſh, and Wheat flower or Barley flower.

Alſo Birds boyled, or moiſt roaſted, for *Galen* ſaies meat over roaſted turns eaſily into choller, but I rather lay the fault in the Dripping, the brains and ſtones of theſe are beſt.

Alſo Brook fiſh, Cray fiſh, Turtles of the woods and water Frogs are good meat in Hecticks, and Snailes, but ſome diſallow of them, becauſe they are ſo ſlymy. The *Carthuſian* Friers, make up the tailes of Cray-fiſh, with Barley, Almonds and Sugar, which is excellent.

And yolks of Eggs boyled with Wine and Sugar called in Dutch *Beinwarme*, and green Cheeſe.

Alſo a Panado of bread boyled in broath: Or this. Take *crums of bread* ſteept in *Milk*, and add *Almond Milk, Roſe water and Sugar*. Or *Barley cream* made with broath.

Alſo Almonds, Pine nuts, Piſtachas alone, or with Milk, or Sugar, are good.

In meat give Eryngus and Satyrion roots and purple flowr'd Goats beard, Purſlane, Bugloſs, Mallows, Violets, Endive, Spinage, Betts, Colewort and moiſt fruits.

In drink which they love beſt, becauſe they muſt not endure thirſt, give theſe.

Wine that is of a middle ſort between ſweet and ſower is moſt refreſhing, if it be ſtrong, daſh it with water. Wine taken much inflames and muſt not be given here or when there is a Phthiſick or cough.

When the Conſumption is manifeſt and there is no ſuſpition of any remainder of the putrid Feaver, give Milk, for a long time every day: riſing from four ounces to a pint. Womans Milk that hath been four moneths delivered is beſt: the next is Aſſes, which cure, if it be curable. Then Goats milk, after the butter is taken out, and if you fear it will corrupt, add ſugar. If yout fear a looſneſs, infuſe ſteel in it: the reſt ſhall be ſhew'd in the Phthiſick.

Make Almond milk with pine Nuts, ſeeds of Melons and Gourds or Poppies into Emulſions.

Or give Cock broath, ſtrained from the fat continually, or a Decoction of Capons fleſh and Cray-fiſh.

Or Barley in Chicken broath.

Or this Julep: Take *Violet and Roſe water, each four ounces, white Sugar half a pound, Bugloſs water two ounces*; boyl them to a Julep, give it with boyled water or lean broath, or Barley water.

Or thus: Take *juyce of Purſlane* (highly commended in this cauſe) *three ounces, of Bugloſs an ounce*: boyl them to a Julep with *Sugar*, give a good proportion often.

Some commend, the juyce Burnet and Turneps.

Another Syrup: Take *Bugloſs and Eryngus roots, each two ounces*; *Satyrion roots an ounce, green Liquoriſh three ounces, Lattice, Purſlane, each a handful*; *Violets, Bugloſs and Borage flowers, each a pugil*; *Jujubs and Sebeſtens, each eight pair, Cold ſeeds bruiſed two drams*, boyl them, ſtrain and infuſe *red Sanders a dram*; make a ſyrup with *Sugar*, to be taken alone or otherwiſe.

Give Children that hate Medicines, Purſlane and Scabious water. Alſo waters diſtilled from Snails, Cray fiſh and Mans blood, and from new milk.

Or theſe: Take *Capon broath of his fleſh*, well boyled, add *a pugil of Turtle, Cray fiſh or Frogs fleſh, conſerve of Roſes, Borage, Bugloſs, Scabious, Violets, each an ounce*; *Diamargariton frigid, Diatragacanth frigid, each a dram*; *Cinnamon two drams*, diſtil a water from them.

Another very profitable: Take *the Lungs and Heart of a Calf, the fleſh of ſix Cray fiſh or ſeven, Frogs four*, cut them ſmal, and add *Diatragacanth frigid ſix drams, Cordial temperate ſpecies two drams, Cold ſeeds hull'd and Purſlane ſeeds, each half an ounce*; *Henbane ſeeds*, if there be a Cough, *a dram*, add *Purſlane and Linden flower water, each three ounces*; *Lilly water four ounces*, diſtil them in *Balneo*: give this alone, or with *Julep of Roſes*.

There are divers reſtoring confections that are pleaſant.

Marſh-pane, thus made: Take *the paſt of which Marſh pane* is made *a pound, Cold ſeeds cleanſed an ounce, Pine nuts two ounces*, ſteep them in *Milk*, and bruiſe them

them, *Diapenides and Diatraganth frigid, each a dram*; *Diamargariton frigid half a dram*, make Cakes.

Or thus: Take *Capons flesh and Frogs, Hips and Crayfish tailes*, boyled in *Purslane and Rose water, each two ounces*; beat them, add *sweet Almonds blanched two ounces Pine nuts and Pistachaes*, steept in milk, *each an ounce*; *Gourd seeds cleansed half an ounce, white Starch two ounces, Sugar four ounces, Pearl half a dram*, sprincle them with *Cinnamon water*, and make a past with *Milk and yolks of two Eggs*, make Cakes.

Or thus: Take *flesh of Frogs Legs and Cray fish or Turtle flesh of the wood*, if you can get it, *each four ounces*; boyl them in *Barley and Purslane water*, add *the four great cold seeds, each a dram*; *white Poppy seeds two drams, Raysons stoned and Sebesten, each an ounce*; then add *the species of the resumptive Electuary, Diatragacanth frigid, Diapenidies without species, each half a dram, Pendies and Sugar-candy, each two ounces*; *Pine and Pistacha Nuts, each half an ounce*: make Cakes with *Gum Traganth*, dissolved in *Rose water*.

They must often take Sugar of Roses, or Sugar boyled in Violet or Purslane water.

Or this mixture: Take *conserve of Violets, Purslane, Bugloss, of each an ounce*; *Conserve of Roses half an ounce, Diamargariton frigid a dram, Sugar*: make a mixture.

For outward means and cold Air is better then hot and dry.

Baths do good by moistning and cooling the body which is hot and dry, and by loosning the parts that nourishment may come to them. The antients used them three waies: first they bath'd in hot water to relax: secondly in warm water to moisten: and thirdly in cold to keep in the moisture, by closing the Pores.

We use River or Raine water, which is thought best, so hot as may neither heat the body too much or cause thirst or sweat which must not be. And he must not be in above an houre, once or twice in a day, before meat. Some think it good to let the Patient take in the Fume of the Bath by a Linnen cloth before he goes in.

An artificial Bath is made of roots of Marsh-mallows, Mallows, Violets, Purslane, Bugloss with the roots, Chamomil flowers in tripe broath, Veal or Mutton broath that is fat, And for the Rich we add milk, Oyl or Butter.

I would allow of Sulphur baths, if they be near, used by degrees, because they make the body Oyly, as I have found by experience.

For this cause we anoynt after bathing, or at other times, morning and evening: the Back, Sides and Belly with loosning Oyls.

Or thus: Take *Mucilage of Fleabane and Quince seeds each half an ounce*; *Gum Traganth* infused in milk *half a dram, fresh butter an ounce, white Hens and Ducks grease, each an ounce*; *Oyl of sweet Almonds and Violets, each two ounces*; *with white Wax*: make a Liniment.

Anoynt the Breast and Heart thus: *Take* Oyl of Violets, Gourd seeds and sweet Almonds, of each half an ounce, Ducks grease an ounce, *or use the resumptive Oyntment*.

Some anoynt the Liver with the same, but we omit it, because the Liver will have little benefit thereby and the belly may be loosned therewith, which is naught. Neither do we put flesh in Oyntments, as some do.

We apply Epithems to the Breast, Heart and Pulses, because the Arteries are hot: As, *Take* an Emulsion of sweet Almonds made with Decoction of Barley, Purslane and Violets: *add* fresh Butter and Capons grease Dip cloths therein and apply them warm.

A Cordial Epithem: *Take* Violet, Rose, Purslane, Scabious, Bugloss and Borage water, each two ounces; juyce of Apples an ounce, juyce of Housleek or Lettice half an ounce, white wine an ounce.

If bruised Purslane, be laid to the Stomach, it is thought to be good.

And gentle Frictions after bathing to draw the nourishment.

The nourishers prescribed, both strengthen and restore. It is a good rule for Hecticks to eat often and little, and for all weak persons.

When meat is loathed and they are very weak, some give nourishing Clysters: Thus, *Take* milk half a pinte, Capons broath two ounces, two yolks of Egg, *give it often and let it be kept long*.

Take heed of things that weaken, as fasting, which they cannot endure. And of strong motions of the Body, Mind, And of watching, for sleep is good. And all Evacuations, especiall Venery, are hurtful.

The chief accident is a loosness of the Belly, and it hastneth death if it continue, we look to that with anoynting the Belly, and the like.

Somtimes constant binding in the Belly is troublsom to them, which we prevent by a gentle moistning Clyster. Thus: *Take* Chicken or Tripe broath, *boyl therein* Lettice and Mallows, *add* Cassia or Tamarinds an ounce, Oyl of Violets and Water Lillies, of each two ounces; Honey an ounce, *give it*.

Or this gentle Potion, Manna with Chicken broath, or Cassia, or syrup of Roses solutive, or of Violets.

The Cure of double or treble putrid fevers.

We call them Compound Feavers, when divers Feavers are at once, In these the Cure chiefly altereth; For if two putrid Feavers, or three or two continual Feavers, or double intermitting or triple Fevers meet, being all of a kind and differing only in respect of the cause, in this that it is putrified in divers places, but in the same Vessels, and the fits come not the same daies. These are rather divers then Compounded Fevers, and the Cure must be, as if there were but one, as in putrid intermitting and continual Fevers was said.

But if the Fevers be compounded of divers, which may be two wales, as when a putrid continual is joyned with a putrid intermitting, or a putrid continual, or intermiting with a Hectick; when the causes are divers and meet together. Then the Cure must be directed to both, and it differs from the Cure of simple Fevers.

The Cure of a Semi-tertian.

If a continual putrid be joyned to an intermitting in a Semi-tertian, of what kind soever it be, because the cause is double and the filth is in the hollow Vein and the Meseraicks also, and doth not only constantly perplex the Patient, but brings fits every other or third day, increasing the heat and Symptoms, we say it is very dangerous. Especially if there be swounding when the Fevers meet. Therefore a Semi-tertian useth to turne into a Hectick, or leave a Dropsie behind it,

The Cure of a Semi-tertian, is as in other Fevers, first taking away the Excrements, and Bleeding and Concoction of both matters, by purging and provoking sweat and Urin, often: with things proper for the Humor, whether Choller, Flegm or Melancholly, which breed the Fever. All Physitians first give remedies against the swounding, and Cordials which resist

Poyso

Poyson and Pestilence. And we apply them inwardly and outward first of all.

And for the Fever we direct evacuations, preparing and altering Medicines agreeable to the constitution and the humor predominating, as the firs rise or abate: as we shewed in continual and intermitting fevers; And if other accidents besides swounding do happen, we correct them as was there declared.

The Cure of a Hectick joyned with a putrid Fever.

If a Hectick be joyned with the Fever that produced it, it wil not be a pure Synoch for that continueth but three or four daies, but a puttrid continual, which we know by the consumption of the body, or an intermitting long Tertian, or Quartan, and then we perceive the Hectick, not only by leanness, but by a feverish Pulse after the fit. This makes us regard both. Thus,

When we concoct the matter and open obstructions we added somthings that resist the Hectick: As, Take *Syrup of Endive and Violets, of each an ounce; Endive and Purslane water, of each two ounces: with a little Diamargaritum frigid:* mix them.

Purge gently: Thus, Take *Rhubarb a dram,* infuse it in *Endive and Purslane water,* strain it, add *Syrup of Roses solutive and Manna, each an ounce.*

These præperatives and purges, if the Fever require and the Hectick be not hurt thereby, are to be repeated.

The altering means must moisten soundly, by reason of the great distemper in the Heart, therefore we let them drink freely. We grant no milk, by reason of the putrid Feaver and Head-ach, as *Hippocrates* teacheth, except out of the fit, we allow a little for custom sake.

In Juleps and Conserves and the like, we put moisteners mentioned in the Hectick to open obstructions and resist corruption in the Fever that is joyned therewith.

At first before the Hectick comes when we fear it, we apply in the Feaver more moistning and cooling Epithems to the Heart and Pulses, then ordinarily.

And we begin to use Baths sooner, especially in Quartans.

Also accompanied Fevers, with other Diseases joyned, whether they go before the Disease, or are Sympand follow after, have a different Cure. As they are joyned with Eryspelas, or Botches, or other hot Diseases, or Meazels, or small Pox, or Phthysick, or Cachecy, or evil habit, or other accidents. And we shall in order set down the cure of the six sorts of accompanied Fevers,

The preventing and curing of Synochs & Ephemeal Fevers that produce Botches and Eryspelas.

If a putrid Synoch or Ephemera be with an Eryspelas or Botch, it ends in respect of the Fever as a single Fever doth, nor is it more dangerous than that, but in respect of the humor. But it is most troublesome when it comes once a yeer with the Gout, as in old men which are most subject to it.

For whose cause in regard worse accidents are feared, as internal Inflammations, Pleurisies and Impostumes in the Lungs, we shal shew how to prevent, and cure if it be come.

We prevent this Synoch, if the blood abound, by hindering its increase: if it be hot, by tempering it: if thin, by thickning it; if impure by purging and clensing it.

In full bodies we let blood spring and fall, and at other times to prevent.

And use scarification every month, and after cupping in the shoulders.

And we purge before and after Winter, and oftner if there be a foul body: but I have observed that violent purges have brought and not hinderd this Fever, by moving of the matter,

Tops of Hops, Fumitory, Elder buds, Senna, Epithymum and Polypody boyl'd in *Whey* is good to be drunk all the month of *May* in yong and strong people.

Or with this Apozem. Take *Polipody three ounces, Senna an ounce and an half, Carthamus seeds an ounce, Thyme, Epithymum, each half an ounce; Tamarinds two ounces, Dock roots an ounce, Liquoriss an ounce and an half, Succory roots two ounces, Violet, Endive, Lettice and Bugloss, each a handful; Prunes and Sebestens, each twenty pair; Raisons ten pair, Anise half an ounce, Cordial flowers a pugil, cold Seeds half an ounce:* boyl them in *a pint* of the *strained liquor,* dissolve *juyce of Roses and Bugloss, each an ounce; juyce of Apples three ounces, with Sugar and a little Cinnamon,* make a *Syrup,* give *an ounce* by it self, or in *Whey,* or other *Liquor.*

Sharp waters drunk often for some weeks hath preserved many.

Instead of Spaw waters you may make a Drink to cool a hot Liver, and the blood and spirits.

It is good to sweat often in due season, for thereby the blood is purged from excrements, especially such as are thin. This must be done by Exercise, Stuphes, or Fomentations, and by things taken into the Stomach.

Let the Diet be moderate in quantity. And beware of all things which easily inflame the Blood and Spirits.

The Cure is directed partly to the Fever, partly to the Disease that accompanieth it. As for the Fever, because Nature from the beginning doth of her own accord send forth the Vapors which rise from the Inflammation of the blood by transpiration or sweat, we must do the same in helping her, that so some part of the cause being taken away, little or none may be carried to the emunctuaries or pores, or other places internal which are worst. Wherefore since Nature in this Fever goeth about first to expel by sweat, which she doth later in a Synoch, let us at the first give things that cause sweat (but not very strong, least the body hot before be worse inflamed thereby) or that help, and make them sweat more freely.

Let the Patient be quiet and covered, and not exposed to the cold Air, which hath been so dangerous to some, that many fear to apply a cold wet cloth outwardly, or to an Eryspelas.

Some advise plenty of Barley water to be drunk, and to boyl Lentiles therein, to send forth the matter, and to sweat, as in the small Pox. And if Nape and Citron seed be added, the Decoction wil cause more sweat.

Also the Decoction of Sorrel roots with burnt Harts-horn and Lentiles husked, and Nape seed with a little Cinnamon provokes sweat.

And divers distilled waters, but here we make choyce of the most temperate in regard of the Fever, as that of the three colored Violet highly comended, also of Fumitory, Carduus, Marygolds, Chervil, and such as are usually given in other Fevers, which begin in the same manner.

To these Waters we add Rob, or syrup of Elder, or of Danewort, or syrup of Ambrosia or Treacle. Also we refresh in the sweat, or after it especially: with a little Bread tosted and dipt in Water and white Wine, with a little Cinnamon and Sugar, and if you do so at first, they wil sweat the better.

Blood-

Blood-letting is not so requisite here as in solitary Fevers, except there be fear of greater internal inflammation, and a Plethory; for the sending of blood into the Emunctuaries, and the extremities is not so much to be feared, that it should be stopt by letting blood.

The Belly must be loosned if bound, as in a solitary Synoch, and purged a little, if there be ill humors with Cassia or Manna.

And the Alterers must be given in, and applied outwardly, if the heat be great, as in a solitary.

And the Accidents corrected as there said.

As for the Botches, or Buboes, they somtimes vanish of themselves, without any application, except in the Neck, where they are kept from the Air with a cloth or a Fur. When they are ill ordered, they burn to an Imposthume, as we shewed.

As for Eryspelas, that departs presently after the Fever, but if it be hot and painful, asswage it, as shal be shewed. When it is ill cured, it turns to an Ulcer, and somtimes into a Gangrene. And therefore commonly they say, that if any Ulcer, or Tumor, or scurf, come after, it was caused from the evil curing or wetting of the Eryspelas.

The Cure of Fevers coming from external Inflammations.

If a Synoch be joyned to a hot Disease or Inflammation, and their Accidents, and there is an outward Inflammation with a tumor, Contusion, Wound, or Gunshot, that causeth a Fever, if it be small, little is given, but such as may be mixed with the medicines against the Tumors: as bleeding which is good for Revulsion. And loosning of the Belly, and other altering Medicines used in other Feavers.

The Cure of Feavers that produce internal Inflamations.

When there is internal Inflammations of the Lungs, ot in a Pleurisie, or Peripneumony, or in the Liver, Spleen, or other parts, we direct our Medicines to the Inflamation, rather then to the Fever, which requires no such hast, as the Inflamation, and goes away with the Disease, except as I shewed in the causes, it springs again: Yet we so order the Inflamation that we increase not the Feaver. And the Medicines are best, which are contrary to both.

Blood-letting is excellent in both, for it is the chief remedy in a Synoch, and it hinders Inflamation by drawing the blood from the Noble part. Therefore it must not be neglected, but let out freely and somtimes repeated.

It is good also against both Fever and Inflammation to keep the Belly open with gentle Laxatives or Clysters. Strong Purges are Enemies to both, because they take away more of the cause, but inflame the body, and stir up the blood to flow to the Inflammations and abate the strength which is here precious. And they are to be feared least they bring a Diarrhæa which is here dangerous and deadly. Therefore imitate not the Empericks in giving them.

Things that are given cold, though they are contrary both to the Fever and the Inflammation, yet they must be given warily with regard to the part where the Inflammation is, lest they hurt one, when they profit the other. Although much cold water is good against a Synoch, yet it would hurt internal inflammations by a sudden repercussion, Therefore we give it prepared for that part, and in Diseases of the Breast we give Pectorals, and in Diseases of the Liver openers of Obstructions mixed therewith. And therefore sharp waters though they may do good in Fevers and many internal inflammations, yet we give them not in diseases of the breast, especially if they bind and are very sour. This rule is to be observed not only in ordinary Drink, but in Juleps, Syrups, and Conserves.

Remedies applied outwardly must be profitable for both, they must not increase Inflammation as Epithems, though they are in all Fevers profitably applied to the Heart, yet in Inflammations of the Lungs, they wil do hurt.

The Diet which is thin for a Fever, is good in an Inflammation, also while the matter flows, that while the hungry parts catch away blood for nourishment it may less come to the part affected.

But we have shewed at large in our Practice how to order internal Inflammations with a Fever, whether it went afore or followed them.

The Cure of Synochs putrid, malignant, or pestilential, which produce Measles or small Pox.

Fevers with Measles or Small Pox which are Synochs, or putrid, malignant, or pestilential, are judged and cured according to their divers causes and the age of the Patient. These are less dangerous when they come not from a malignant cause, and then they keep the same course with Synochs, Solitary, Putrid, or not Putrid. But if there be a malignant cause not pestilential, these Fevers alone kil not Infants, because Nature sends out the putrid malignant cause in the blood, by many pustles, outwardly, but if not, they are dangerous, especially if pustles be in the Jaws, Lungs, or Eyes. But in people of age, whether the Fever send forth Pustles or Spots, because the cause is alwaies malignant, and hath long lurked in the blood, never purged out, or not having the small Pox in their Infancy, it is dangerous, and it observes the course of maliguant Fevers which are popular, or epidemical; though this is seldom. We Prognosticate by the Pustles, for if they come forth when signs of Concoction appear in the Urin, and the pulse is better, and the accidents of the Fever abated, it is a good sign, if otherwise, it is ill. If a pestilent Fever brings forth the Pustles rather than others, which is seldom seen, it is deadly: And we have shewed that many thousands of Infants have been so taken away.

The Cure is, when the Fever is come, and we suspect the pustles wil come forth, because it is ordinary in that place, or because they appear; we must help Natures motion to expel them, and the rather when the cause is malignant, with the expulsive medicines mentioned, and order the Fever with Evacuations and Alterations, look to the strength, and correct the accidents, Thus.

We give the expulsive medicines mentioned to expel from the Center to the circumference at the first, with respect to the cause, whether putrid, malignant, or pestilential, to yong, weaker; old, stronger; beginning with the weakest means thus.

Take *Figs dried twelve, Barley and Lentiles, each a pugil*; boyl and drink them.

Or, Take *Lentiles and Barley, each a pugil*; *dried Figs twelve, Jujubes fifteen, Dates four, Raisons twenty pair, Liquoriss half an ounce*: boyl them, you may add *Sugar* and a little *Saffron*.

Or add to the same *Fennel seed two drams, Quince seeds, Gum traganth and Gum lac, each a dram*; *Saffron half a dram*: boyl them.

The *Arabians* make it thus. Take *dried Figgs seven drams, Lentiles and Gum lac, each three drams*; *Gum traganth and Fennel seeds each two drams*: boyl them to the third part.

If there be Obstructions and a foul body. Thus,

Take *Graſs and Aſparagus and Fennel roots, each an ounce*; *Liquoriſh an ounce and an half, Sorrel and Maidenhair, each an handful*; *Cordial flowers a pugil, Figs twenty, Rayſons ſtoned twelve paar, Fennel ſeeds a dram*; boyl them, diſſolve in a draught of it *ſyrup of Citrons or Limons half an ounce, Mithridate a ſcruple, with waters of Sorrel and Marygold.*

Alſo: Take *Carduus ſeeds a dram, Nape ſeeds a ſcruple, Citron ſeeds half a ſcruple, Sorrel ſeeds half a dram*, bruiſe them, and add *Carduus, Sorrel and water of Pauls-Betony, each an ounce and an half*: make an Emulſion, add *ſyrup of Limons or Citrons an ounce, Harts horn burnt a ſcruple, Pearl half a ſcruple, Bole half a dram, Diamargariton frigid half a ſcruple*: make a Potion.

Or: Take *Barley and Lentil water, and a dram of Sorrel ſeed, Grains of Paradice a ſcruple, Citron ſeeds half a dram*: boyl them, add *ſealed Earth a ſcruple*: give it.

Or give our Antidote in Pouder, if the heat be not great mentioned in the Cure of the Plague.

Or thus: Take *roots of Mock chervil* (which is never omitted, if it be to be had) *two ounces, roots of Tormentil, white Dittany, each two drams*; *Cordial flowers a pugil, Sorrel a handful, Lentils half a handful, Earth of Lemnos a dram*: boyl them in two pints of water, ſweeten it with *Sanders, and five ounces of Sugar*, drink often.

Or this which makes the Puſtles come forth ſpeedily, Take *Monckes Rhubarb, Tormentil, white Dittany and Graſs roots, each an ounce*; ſteep them in ſpring water, boyl them to the conſuming of the third part, add *Sugar four ounces, Vinegar an ounce, or juyce of Citrons an ounce, or an ounce and an half of the ſyrup thereof*: drink it two or three daies.

If the Feaver be great: This, Take *ſyrup of Citron, Vinegar or Limons with boyled water or Sorrel water and Bole and Bezoar ſtone*, drink it.

Anoynt the Back, to fetch out the Puſtles, as ſome do the whol Body. Thus: Take *Oyl of ſweet Almonds an ounce and an half, Oyl of Chamomil half an ounce, the reſiomptive Oyntment an ounce.*

Or uſe this Fomentation: Take *Chamomil and Melilot flowers, of each a pugil*; *Mallows a handful*: boyl them.

Let the Patient be in bed, and keep from the Air.

Alſo Scarifications, with Cupping-glaſſes upon the Shoulders, fetch out the Puſtles and Spots, when they appear.

And rubbing with a red cloath.

The vulgar think, the beholding red things, makes the Puſtles red, and therefore cover them with ſcarlet.

If the Fever be a Synoch it is good to bleed at the firſt to take out ſome of the inflamed putrid or malignant Blood, and abate the Cauſe in Men and big Children, not in Infants. The Spaniſh Phyſitians taught by the Jews, did formerly and now alſo, with the French Phyſitians open Veins in Children in this Diſeaſe, but not when the Spots or Puſtles do appear leaſt natures motion be hindered.

If the Fever be very malignant, which bringeth forth theſe Puſtles, or the Patient in years, give the following.

Looſen the Belly at firſt, before Blood-letting (if it muſt be) leaſt the Excrements increaſe the heat, with a Clyſter or Laxative.

Or give this Potion to Men and Children in a leſs quantity: Take *Violets a pugil, Sebeſtens and Jujubes, of each ten, Tamarinds three drams*, boyl them, and add *Manna an ounce, Caſſia ten drams.*

Some men muſt have ſtronger purges, but take heed of a Fluz or Dyſentery, and add alwaies ſomthing to reſiſt Malignity.

As thus: Take *Rhubarb four ſcruples, Spike half a ſcruple, Scordium half a dram, yellow Myrobalans a dram and an half*, infuſe them in *Sorrel and Carduus water*: ſtrain and diſſolve *ſyrup of Peach flowers and Roſes with Senna, each an ounce.*

Or: Take *Tryphera perſica ſix drams, Manna an ounce and an half, ſyrup of Limons an ounce, of Violets and Roſes each an ounce*; *with Sorrel, Scabious and Carduus water*: make a Potion.

Or theſe Pills: Take *Aloes two ſcruples, Rhubarb a ſcruple, Myrobalans half a ſcruple, Agarick a ſcruple, with ſyrup of Sorrel*: make Pills.

Or this Clyſter: Take *Mallows, Beets, Mercury, Sorrel, Bugloſs, Borage, each a handful*; *Balm half a handful, Cordial flowers, Bran and Barley, each a pugil*; boyl and ſtrain them, add *Tryphera perſica an ounce, Caſſia ſix drams, Honey an ounce, Oyl of Violets three ounces, with a little Sale* make a Clyſter.

Uſe alterers to cool, and reſiſt corruption, as in a continual putrid Fever and Malignant. It is not good to uſe cold things outwardly for fear of Repercuſſion, or ſtriking in the matter,

Reſtore ſtrength as there, with Lentils and Barley and give no Wine till the declination.

We have ſhewed elſe where how to order the Puſtles.

If there be a Diarrhea or Flux in the begining, (for in the end it often cureth) by the venemous Humors in the Guts, you muſt mix the Troches of Spodium or burnt Ivory with expulſives.

The Cholick is abated, with Clyſters or Oyl of ſweet Almonds.

Vomiting is ſtopt with a cruſt of bread dipt in Vinegar, given and applied.

For the Syncope or Swouning: Take *Pearl half a dram, Bole a dram, filings of Gold and Unicorns horne, each a ſcruple*; *Citron ſeeds half a dram, fragments of precious Stones, each a ſcruple*; *with Sugar*, diſſolved in *Roſe water*: make Lozenges.

If the ſleep be great and cauſe aſtoniſhment, expel it with Rubbbing, Ligatures or Binding and Cupping.

The Cure of pure Synochs and of putrid Malignant fevers, which produce the Botch or Carbuncle.

With other Puſtles, as a Carbuncle not Peſtilential, if there be a Synoch pure, or a putrid, or malignant, but not the Plague, we ſhal proceed in reſpect of the Fever, as formerly. Uſing things to expel the cauſe, laying upon the Carbuncle things that draw out venom, and then we open a Vein, looſen the Belly and ſtrengthen the Heart inwardly and outwardly with coolers and reſiſters of venom, hold up the ſtrength, and correct accidents, and Cure the Carbuncle, as was ſhewed.

The Cure of lingring or Hectick Fevers which are joyned with Phthiſick and Cathexy.

A lingring Symptomatical fever turned into a Hectick, as in the Phthyſick is uſual, muſt be as a ſolitary Hectick. But if it be fixed and the Diſeaſe not gone that cauſed it, it is incurable. But if before it is a Hectick it hath little heat and ſmal accidents and is little alone regarded, but the whol cure is directed to the diſeaſe accompanying it, whoſe Symptoms are more urgent, as ſhall be ſhewed, having an Eye to the Fever in other preſcriptions for the Diſeaſe.

And we muſt take away no more nor leſs blood, becauſe there is a Fever.

But we purge in Cachecticks for the Fever with gentle things that inflame not.

If the altering Medicines must be hotter for the Disease, we must cool them for the Fevers sake. And in a Consumption before the Hectick is confirmed, we may use things that moisten rather then violently cool.

The Cure of lingring Fevers rising from a dead Child, After-birth, or congealed Blood.

If there be a Fever from retention of the After birth, a dead Child or congealed Blood, it is gentle and Symptomatical and to be cured as the other: except there be an Inflammation and then it is to be cured, as a Fever with Inflammation above mentioned.

CHAP. III.

Of Head-Ach.

The Kinds.

THe internal pains of the Head, which reach not so outward, as to be increased by the touch, as the internal, are either unusual, or accustomed, or solitary, or accompanied: Hence arise all the Kinds of them.

Cephalalgia, or the Head-ach called Soda *by the Arabians.*

We call them unusual, which are new from some fresh Cause, and which the patient never had before. This is call'd *Cephalalgia* or *Soda* by the Arabians. In this the Head either is pained in some distinct place, or here and there.

The last pain is called an indistinct or wandering pain, over all the Head: one while stretching it, as if it would tear it, which some think to abate by binding or pressing, another while it beats only in the Temples, somtimes it pricks only in the Ears, somtimes it is a heavy pain like a weight & this is call'd heaviness of the Head.

Heaviness of the Head is a kind of Cephalalgia.

Somtimes the pain is distinctly in the fore part of the Head and Temples, or the right or left side or both or in the Fore-head or roots of the Eyes, as if they would fall out, the Eyes are red and the Temples beat with pricking, somtimes in the Ears, which are oftner in *Cephalalgia*: somtimes it is behind like a weight, but oftner in Women then Men, Somtimes in the Crown.

They are usual pains which are old or return upon smal occasions, they are on both sides, or in one side only.

Cephalæa.

When pain is on both sides of the Head, or the greatest part, it is called *Cephalæa.* In this the pain is continual, which ceaseth not, but is somtimes gentler and stronger othertimes. or intermitting or comming by fits: these are ordinate at certain daies, or weeks, morning, or evening, or inordinate returning from any light Cause.

Hemicrania.

If the pain be in one side of the Head as if it were cleaved it is called *Hemicrania*: This begins from the beating of the Temples and goes to the Sagital or arrow like suture, dividing the Head long waies, and comes every third or fourth day: There is another sort which at a set hour every day for divers weeks torments the Patient with a pricking pain in some part of the Skul, with this I was vexed some weeks about my right Eye-brow.

They are solitary Head-aches that come alone no disease going afore, as that of wine and drunkness, which begins after sottishness and amazment therefrom is past.

Those are called accompanied, which are joyned with other diseases: which they follow for the most part, and are Symptoms, as when the chief Symptom in a Fever is the Head-ach, and those Head-aches that accompany Melancholly and Falling-sickness. Or those which come from a Catarrh, before or behind with heavines; Or that come in the Diseases of natural parts, accompanied with divers other accidents, as Cachexy and suppression of Terms. Or when in the French Pox there is a *Cephalæa* that molesteth at night most, both inwardly and outwardly.

The Causes.

The part affected.

Head-ach must needs be, within the Skul, or in the meninges, or filmes, or in the brain it self; It may be in the meninges because they are sensible. And they being two, the one thick the other thin, and close joyned together and to the Vessels can carry the pain from what side soever it begins. So that it is hard to distinguish which of them is most affected, but by conjecture, as when the disease is in the outward thick Membrane, the pain must be outward by reason of the Pericranium joyned unto it. But if the inward thin filme be afflicted, the pain is deeper and in the Brain as it were. In both the pain may come to the roots of the Eyes, because the Balls of the Eyes have tunicles from the Membranes of the Brain. But in regard both the Tunicles are distinct with the Brain long waies in the middle of the Skul, it comes to pass, that if the disease be only on one side, only half the Head is pained, but if on both sides, the pain is on both sides, now in one, then in the other, as the cause is more or less.

Many affirm that there can be no pain in the substance of the Brain, because the substance of the brain is insensible: But we affirme that those parts of the brain, to which the tender film, or Meninx grows, which produceth the sensitive Nerves cannot be without sense, and that they may give occasion of pain with the meninges by consent, and yet without hurt to the mind, this pain is stupefying rather then sensible. And in heaviness of Head I suppose that that pain or sence of weight before and behind, comes from the brain offended in the part from whence the Nerves and Marrow proceed.

The Disease which is in the meninges of the brain, or the sensible parts thereof, where the Nerves begin, which causeth Head-ach, is either manifest when a hot distemper inflames the parts or cold, when it plucketh them or solution of continuity, stretching or otherwise hurting: Or it is a hidden quality which is offensive to these parts. The helping Cause is the disposition of these parts to suffer. From which cause, if they be little, the Disease is less; if great, or more causes meet the Disease is greater.

A hot distemper of the Brain causeth Head-ach.

A hot distemper is often the cause of Head-ach, for the Head (as I shal shew) easily is inflamed by reason of the plenty of spiritful blood, and is pained by a preternatural heat: And the rather when there

there is a matter which raiseth the heat to stretch and disturb it. Or if there be an evil quality in them that offendeth the brain, as it is usually from a hot vapor or humor from blood and choler.

Vapors going to the Head cause Head-ach.

The Head being uppermost easily receives Vapors, especially thin. these heat and pul, and give occasion to Head-aches by consent. This comes from outward scents, but it is rather the return of an old pain which was usual, than a new. And sometimes from things eaten, that with their Vapors strike the Head. These may cause new Head-aches if they fil the Brain, as in Drunkards who are pained in their Heads, from the thin hot vapors of the Wine, that heat and prick rather than stretch the Brain, by a force, as I shal shew, contrary to the Brain and Nerves. This pain comes after sleep from the stupifying or Narcotick quality of the Wine, and the heat remaining and continues till the Vapors are thrown out by Snorting. Vapors sent to the Head from hot, cholerick, and putrid humors in the Veins, cause the Head-aches in most Fevers; and out of Fevers they cause the fits of the *Hemicrania* or half Head-ach: And Choler in the Stomach sending Vapors, causeth Suffusions and Vertigoes or Giddiness and also Head-ach by consent.

Blood in the Head causeth Cephalalgia.

Much spiritful Blood conteined in the large cavities and passages of the Brain, by stretching, or if it be hot by inflaming, it causeth a Dotage, or by heat, a Cephalalgia, or bloody Head-ach called *Soda*. This is Cholerick, Melancholick, or Flegmatick, as the blood abounding is thick or thin. This Blood comes into the Head, from a plethory in the Body, which is from divers causes. Or it is drawn thither by the heat of the Sun or Baths, Noyse, Coughing, Stroaks, Falls, or great motion of the Body or Mind, and made hotter: Especially in hot Diseases, this is a Symptom, especially in Fevers in which the blood inflamed with the spirits in the Head, as it is also in the great Veins. hence comes Head-ach in all Fevers, or from the Vapors, for in Fevers the Head is made hotter as wel as the body. We know when head-ach comes from blood, from things foregoing, and from the beating pain, and redness of the Eyes, and other causes.

Also if such excrementitious Choler as comes pure from the Ears separate from the water, go to the Brain and Meninges, it makes a pricking, but it can scarse get thither without moisture, nor doth it then cause pain, because in the Jaundies, except other causes happen, there is no Head-ach.

A cold distemper of the Brain causeth Head-ach.

A cold Distemper may cause head-ach, as wel as pain in the Nerves, by binding and biting, and by its adverse contrary quality to every sensible part. This may come from flegmatick excrements of the Brain, cooling the membranes and not the Brain (for then there would be sleep or astonishment) as in the Defluxion called *Coryza*, there cometh somtimes actually cold water from the Nose, and then the pain of the Head ceaseth. Also pain riseth from some external actual Cold, either because it astringeth, or is otherwise an Enemy to the Head; from the Air, or Wind, or cold things applied to the Head, these cause Head-ach if they pierce inward. And a little cold external in such as are used to have the Head-ach and to keep their heads warm, if they stand bare wil cause the Head-ach, therefore they defend their Heads Caps and long Hair. And they who are offended easily with heat, take off their Hair, and say, that if it be long they perceive the head-ach to trouble them, as we have observed in old Men and bald-pated, who use to be night and day bare-headed: Also by accident, external Cold by driving the external heat inward (especially when from a cold place one suddenly removes into a hot) may cause Head-ach, rather by heating than cooling the Head.

Distention and Twitching in the Brain is the cause of Head-ach.

Solution of Continuity manifest by external causes, as a stroak, or Wound, that pierceth to the Meninges, make an inward Head-ach with an outward. But distension and twitching pains are caused by Vapors and hot humors, and flegmatick excrements abounding in the Brain, cause the same; not so much by their plenty, as by their coldness and sharpness, which they have by corruption or saltness. And this Headach is joyned with a heat, and is before or behind, as the humor producing it, is in the fore or hinder cavity; and it is heavy like a weight, with stretching and twitching. And it is shorter when the excrements stay not, and longer when they do. and somtimes a Giddiness or Defluxion doth go before or accompany it. And the plenty of these excrements being watrish, thin, sharp, and hot (as we shewed in *Coryza* with Head-ach) flowing from the Eyes and Nose shew the cause. And we have seen abundance of these humors voided, not only at the Nose, but Ears, which have cured an old Ach.

A quality which is an enemy to the brain causeth Head-ach.

Any quality that is an Enemy to the Membranes of the Brain will cause pain in them first, and then in the Head, either by a hidden force, or a manifest quality. As Narcoticks afflict the Brain with their evil quality being taken, and also cause pain of the Head when they which took them come to their senses, and it continues. And Drunkards are not so much hurt by the heat and vapor of the Wine, as by its evil quality. and after Beer we find Head-aches caused from the Hops, which are narcotick and stupefactive, by which quality we observe that Hops are destructive unto Flies. And we have often observed that Head-ach easily comes after the use of Opiates. And after the use of other things not narcotick, but otherwise offensive, as of Saffron, Smallage seed, not only much taken, but smelt to. Also Head-ach, as other diseases of the Head may come from evil vapors or humors, as in melancholly and the like. And in infectious Diseases it may come from the Contagion, as in the French Pox where the quality doth not only outwardly torment the Periostium and Pericranium, causing outward pain, but the inward films or Meninges causing inward, which somtimes are both together. And the Plague or venemous quality hereof, or of any other poyson may cause Head-ach by its enmity to the Brain as wel as the Heart, and not by the heat of the Fever only, though both may be causes of this Head-ach together, as when a putrid Fever is joyned with a malignant.

Weakness of the Brain or a disposition to suffer causeth head-ach

When the disposition or disposition of the Head is to be pained, it comes from very small occations, & this disposition is the cause of *Cephalæa* & *Hemicrania*. we cal this a patible or suffering disposition: but we know not how to explain it, unless we call it too much sensibility, or that which comes from the Parents Hereditary. Or unless it comes from an evil custom in such who have often been pained, or be a weakness which makes the Head more ready to

suffer,

ſuffer ſuch as is after long diſeaſes of the head, wounds, or French Pox, cauſed by long and continual gathering of excrements in the Head.

A fault in the Organ or part cauſeth Head-ach.

Evil ſhape, called *Mala conformatio* is ſomtimes cauſe of a continual Head-ach, as when the ſutures or ſeams in the Skul (eſpecally the Dart-like ſuture called *Sagittalis*) is ſo cloſed or defective, that there can be no tranſpration of vapors and ſooty excreements. This may come from a preternatural rockey or hard conſtitution of the Skul in the Crown, as I have felt and ſeen often.

The Cure.

The Cure of Cephalalgia Cephalæa or Hemicrania of what cauſe ſoever.

A hot Cephalalgia comes from a hot, cholerick, or ſanguine vapor, whether pure or impure, which overheats, ſtriketh, and twitcheth the brain; and this comes from external or internal cauſes, of themſelves, or by conſent, in hot diſeaſes of the Stomach or other parts as in Feavers eſpecially. If it comes of it ſelf by Blood flowing to the Head, it muſt preſently be drawn away, and driven down, and the heat raiſed thereby allayed, and the pain aſſwaged, leaſt it renew the flux, and the reſidue diſcuſſed and conſumed. If it come by conſent from vapors ſent up, the Cure is to be directed to the Diſeaſe of which this Head-ach is but a Symptom, and the cauſe of this ſymptom, eſpecially the fuel from whence theſe vapors ariſe muſt be purged, and the vapors are to be ſtopped, and drawn from the Head and diſcuſſed. a cold Head-ach if it come from external cold, either of it ſelf departeth, or is cured by moderate heat by degrees eaſily. A flegmatick Head-ach if new called *Cephalalgia, Cephalæa*, or old, called *Hemicranæa*, muſt be cured as other diſeaſes ariſing from the excrements of the Brain, by general and particular evacuations of the Brain, and by altering and ſtrengthening, and diſcuſſing the humors gathered, and fetching them forth by ſecret or maniſeſt waies opened by Nature or Art. Head-ach from Narcoticks, eſpecially Wine, or other things that are offenſive to the Brain, or from malignant vapors is cured by evacuateing theſe cauſes and ſuppreſſing their ſtrength. If it be from the French Pox it is ſtrong and not cured but by many and great Evacuations, as I ſhewed in thoſe Diſeaſes of which Head-ach is a ſymptom. But we ſhall ſhew here what is to be done chiefly againſt this ſymptom of pain by evacuations and altering medicines, proper to the ſeveral Kinds and Cauſes of Head-ach.

Remedies to take away the Cauſe, are either to draw away the blood, and with that, humors and vapors from the part affected; or the heat; or the humors upward or downward by the Mouth or Noſe, or by ſweating, or particularly by the Skin of the Head.

Blood-letting when plenty and heat cauſeth Head-ach is appointed to repell, or pull it from the place affected, and to derive and direct it. We make Revulſion by opening the Veins remote from the Head, and this muſt be done at the firſt while the blood floweth to the part: And it wil alſo prevent an unaccuſtomed Headach in plethorick perſons to bleed Spring and fall. either in the Arm, or Foot, or pained ſide, opening the Vein moſt apparent, or that called Cephalick or head-vein in the Arm. or that in the great Toe proper againſt the Head-ach called by the ſame name. In women open the *Saphena*, eſpecially if the courſes be ſtopt. In all which you muſt obſerve the quantity, in a pure plethory you muſt bleed more, in an impure leſs, with reſpect to the conſtitution of the Body. And if the Diſeaſe wil give leave, firſt looſen the Belly. we derive the blood when much is flown to the part, by the Veins neer the Head: Firſt opening a Vein for Revulſion, after the Flux is ſtopped, and a new not feared. This may be done by opening the external jugular Veins in the Neck (as the Arabians teach and others that ſpeak of the Cure of old Head-aches) but for the danger of ſtopping them, by reaſon of their largeneſs, and ſwelling from ſtrong Ligature and Extenſion of Voice. And the rather, becauſe when they bleed much, they cauſe Sterility or Barrenneſs as *Hippocrates* ſaith. Therefore it is better, eſpecially if the diſeaſe be in the Fore-head to open the Branches of the Veins in the Temples or Forehead; And becauſe in the opening of them the Throat muſt be bound to make the veins appear and drive blood into the Head, it is better to open the Veins under the Tongue, which are branches of the internal jugular in the Mouth. Or you may open other branches in the Noſtrils. Or apply Horſ-leeches to the tip of the Noſe, or behind the Ears, or upon the external jugulars.

Many commend the opening of an Artery when there is ſtrong pulſation and heat, eſpecially if there be a giddineſs called *Vertigo*, which is done as we ſhewed in the Fore-head, Temples or behind the Ears.

Cupping-Glaſſes are uſed to ſupply the former, or after other bleeding to advance, becauſe they draw blood, and if ſcarification be made, evacuate it. Theſe are to be applied to the ſides of the Neck, the Shoulders, Arms, Hips and Buttocks, beginning above, and ſo going down, often the ſame day or the day following. Scarrifying alſo afterwards if we wil make ſtrong attraction. Alſo it is good to ſcarifie between the Thumb and fore-finger, eſpecially in a *Vertigo*. or in the Wriſts. ſome uſe it to the Ears.

By Frictions we attract the heat, which are good not only to draw away blood but humors and vapors which cauſe pain. Theſe are made in the Arms, Back, and Feet, beginning above. It is good to comb the Head often, if it be done gently it cauſeth diſſolving of humors, if ſtrongly, attraction of humors to the ſuperficies of the Head. This is beſt in old Head-aches, or in the declining of the other. Ligatures or binding of the extreimities, revel more powerfully than frictions or rubbing. Alſo waſhing of the body with a hot Decoction of Herbs good for the Head, draws humors and Vapors from the Head, And aſſwageth pain as we ſhal ſhew.

Glyſters are good, and uſually afore bleeding, becauſe they ſupple the belly and take away excrements. and after alſo, to draw down blood, ſpirits, and vapors; if they be ſharp, and well applied. And in conſtant heat they muſt be given often, the belly being bound, for the Diſeaſe comes or is increaſed by excrements retained, which ſend up vapors.

In a hot cauſe, eſpecially Fevers, uſe this. Take *Mallows, Violets, Marſh-mallows, Beets, Mercury, red Coleworts* (which beſides their pricking reſiſt Vapors and Drunkenneſs) *each a handful; Bettony* (proper for the Liver) *half a handful, Violets a pugil, Chamæmel flowers half a pugil, Barley, Bran, each a pugil; cold ſeeds half an ounce, Fennel ſeed a dram*: boyl and add *Honey of Violets and red Sugar, each an ounce; Juyce of Beets or Mercury an ounce and an half, Caſſia an ounce, Oyl of Violets two ounces, Butter an ounce*: with *Salt* make a *Clyſter*.

In other Cauſes, eſpecially old pains; Take *Lily roots two ounces, the Emollients, Beets or Mercury, red Cole-*

worts, Pellitory of the Wall, Bettony, Sage, Hyſop, each a handful, flowers of Chamomil, Lavender or Stœchas, Roſemary and Bran, each a pugil; Figs ten, Annis and Fennel ſeeds, each a dram; boyl them, and add *Hiera picra and Diaphœnicon, each two drams*; *red Sugar and Honey of Roſemary, each an ounce and an half*; *juyce of Mercury or Beets an ounce, Oyl of Chamomil and Lillies, of each an ounce and an half*; *with a little Salt*: make a Clyſter.

If the pain come from Humors or Vapors from them or evil quality in them, or if the uncleaneſs of the Body increaſe or nouriſh it, we give divers purges ſuch as are for other Diſeaſes of the Head, coming from the ſame cauſe, differing in reſpect of the cauſe and conſtitution; when the cauſe or nature is hot, we uſe gentle and moderate, but in others ſtronger and hotter, reſpecting the Head in all: giving before them Clyſters: or letting blood, preparing the Humor firſt if need be. And we purge often, if the cauſe require, as in the Head-ach from the French Pox. Thus,

In Cholerick Body we prepare before purging: Thus, Take *Syrup of Endive two ounces, ſyrup of Violets and Sorrel, each an ounce*; *Succory and Bugloſs water, each four ounces*; *Vervaine water* (which is proper for the Head) *two ounces, and Bettony water an ounce*, give it at thrice, and a Tablet of Diarrhodon after every draught.

In Melancholly, thus: Take *ſyrup of both Bugloſſes, each an ounce and an half*; *ſyrup of Harts-tongue and Epithymum, of each an ounce*; *Bugloſs, Vervain, Balm and Bettony water, each two ounces*: take it as the other.

In flegmatick and old pains, where the heat is not great: Take *Honey of Roſes, Oxymel ſimple and ſyrup of Maiden hair, each an ounce and an half*; *ſyrup of Hyſop and Stœchas, each an ounce, Marjoram, Bettony, Vervain, Balme, Hyſop and Sage water, each* as much as is fit, give it as the other with a Tablet of Diamoſchum after every draught.

Or this Decoction: Take *Fennel roots two ounces, the true Acorus or Calamus an ounce, Liquoriſh an ounce and an half, Bettony, Marjoram, Sage, Vervain, each an handful*; *Lavender, Stœchas and Roſemary flowers, each a pugil*; *Annis and Fennel ſeeds, each a dram*; *Rayſons ſtoned two ounces*: boyl them, and add *Honey*, then cleanſe it, and add *Nut-meg and Sugar*, give it three or four mornings.

As for purges, if the pain come from a hot humor, blood or choller, they are as we ſhewed in Fevers and other hot diſeaſes that cauſe Head-ach.

Or thus: Take *Caſſia, Tamarinds, Prunes, of each half an ounce*, take it with *Sugar or Whey*.

Or thus: Take *Caſſia ſix drams, Electuary of juyce of Roſes two drams, Diaprunis a dram, ſyrup of Roſes an ounce and an half, with Bugloſs and Roſe water*: make a Potion.

Or give this Decoction: Take *Beet roots green an ounce, Dock roots half an ounce, Violets two drams, Bugloſs flowers a dram*, (if freſh *two drams*,) *Cold ſeeds, of each two drams*; *Annis ſeeds a dram, Prunes and Tamarinds, each ſix pair*; *Polypody ſix drams, Senna half an ounce*: boyl them, and to one Doſe, add *ſyrup of Roſes an ounce, or ſix drams of the infuſion of Rhubarb*, this may be repeated often.

Or this infuſion: Take *Rhubarb four ſcruples, yellow Myrobalans two drams, Spike half a ſcruple*, bruiſe them and ſprinckle them with a little *Wormwood Wine* till they are ſoft, then infuſe them in *Whey* or *Endive* and *Vervain water*, ſtrain them, and add *Diaprunis two drams, ſyrup of Violets an ounce*: give it.

We uſe this Apozem often in Cholerick perſons, which tempereth the Humor. Take *roots of Succory, Bugloſs, Beets, each an ounce*; *Endive, Succory, Borage, each a handful*; *Mercury half a handful, Cordial flowers, each a pugil*; *four great cold ſeeds, each two drams*; *Purſlane, Lettice and Annis ſeeds, each a dram*; *red Peaſe a pugil, Rayſons ſtoned and Tamarinds, of each an ounce and an half*; *Prunes twelve, Sebeſtens ten pair, Polypody two ounces, Senna an ounce and an half, Carthamus ſeeds an ounce*, boyl them and add *juyce of Roſes two ounces, Manna an ounce, with Sugar and Cinnamon*: make an Apozem for three mornings.

If he had rather have Pills uſe thoſe of *Aſſajereth*, which are good for Head-ach coming from the Stomach, or Aggregative, or *ſine Quibus*, a dram of either.

In Melancholick perſons, when the cauſe is not ſo hot, purge as in other Diſeaſes of the Head cauſed by Melancholly. Or thus: Take *Catholicon half an ounce, Diaphœnicon two drams, Hamech a dram*, take it with *Sugar, or an ounce of ſyrup Fumitory, or with Whey, or Cock broath*.

Or uſe this Decoction: Take *Bugloſs roots an ounce, bark of Tamarisk half an ounce, Bugloſs and Scabious flowers, each a pugil*; *Stœchas, french Lavender half a pugil, Melon ſeeds a dram and an half, Rayſons ſtoned an ounce, Prunes ten, Dates five, Polypody ſix drams, Senna half an ounce, tops of Time two drams*, boyl and infuſe them, *Indian and chebs Myrobalans, each a dram*; ſtrain them, and add *ſyrup of Roſes and Peach flowers, each half an ounce with Sugar and Nutmeg*: make a Potion, repeat it if need be.

Meſues ſyrup of Apples made with black Hellebore, or that with white Hellebore corrected by *Rondeletius* is good, an ounce and an half given alone or with convenient Liquor.

Or this: Take *the opening roots ſteep'd in white Wine Vinegar, barks of Capars and Tamarisk, each ſix drams*; *Liquoriſh an ounce, Bugloſs with the roots, Fumitory, tops of Hops, Eupatorium, by* Meſues, called *Ageratum, Maiden-hair, Cetrach, Germander, Ground-pine, each a handful*; *Balm and Elder, each half a handful*; *Cordial flowers and Tamarisk, each a pugil*; *Stœchas and Chamomil flowers, each half a handful*; *Fennel and Annis ſeeds, each two drams*; *Parſley and Dodder ſeed, each a dram*; *Rayſons ſtoned an ounce and an half, Figs and Prunes, each ten pair, Dates ſix, Polypody two ounces, Carthamus ſeeds an ounce, Senna an ounce and an half, tops of Time and Epithymum, each half an ounce*; *white Hellebore a dram or more, Schœnanth two drams*: boyl them, and add *of Myrobalans a dram and half*, add to the ſtraining, *juyce of ſweet Apples half a pint, with Sugar*, make an Apozem for three or four Doſes, or boyl it to a Syrup.

Or theſe Pills: Take *Pill Indy two ſcruples, Aggregative half a dram, with juyce of Fumitory or Balm water*, make Pills.

Or theſe: Take *ſpecies Hiera without Saffron, a dram and an half, extract of Polypody, and all the Myrobalanes, each two ſcruples*; *Hellebore and Scammony, each a ſcruple*; *Lapis Lazuly prepared half a dram, Oyl of Lavender flowers three drops with ſyrup of Fumitory*, make a Maſs, give it from *half a dram to a dram*.

If a *Cephalalgia*, or a long *Cephalæa*, or *Hemicrania*, come from flegm or wateriſh humors, they muſt be purged as other Diſeaſes of the Head mentioned.

Give Pills of *Hiera* or *Allephangine* often, which are good when vapors from the Stomach offend the Head, or ſtronger, as *Cochy*, ſtinking Pills called *Fœtidæ*, or more temperate, as of *Sarcocol* or Agarick.

Or theſe: Take *ſpecies of Hiera picra two drams, Agarick, Turbith, each a dram*; *Troches of Alhandal, Diagridium*,

dium, Nut-meg, each half a dram; Ginger a ſcruple, Sal gem half a ſcruple, Maſtick half a dram, Oyl of Cloves and Lavender flowers, each two drops; with ſyrup of Stœchas, make a Maſs, give *two ſcruples,* and repeat them in old Head-aches, and add *Pills Cochiæ,* if they work not enough.

Or this Pouder: Take *Turbith two ſcruples, Diagrydium three grains, Tartar of white Wine, Gingar and Lavender flowers, of each a ſcruple; with Sugar* give it in broath.

Or this of Dr. *Ruland* called *Pulvis Diatartar,* it is very pleaſant: Take *Senna ſix drams, Cryſtal of Tartar an ounce, Fennel and Annis ſeeds, each a dram; Cinnamon half a dram, Sugar of Roſes a dram and an half or two drams,* make fine Pouder, give *a ſpoonful* or more at a time often.

Or give Tablets of Diacarthamum or Diaphœnicon.

Or this Potion: Take *Liquoriſh ſix drams, Calamus Aromaticus half an ounce, Hyſop and Marjoram, each half an handful; Stœchas and Roſemary flowers, each a pugil; Figs five pair, Dates three, Annis and Fennel ſeeds, each a dram; Senna two drams, Carthamus ſeeds three drams,* boyl them, and infuſe *Agarick a dram, Ginger a ſcruple,* ſtrain them, and diſſolve *Diaphœnicon and Electuary Indy each a dram,* make a Potion.

Or this Apozem: Take *Liquoriſh an ounce and an half, Parſley and Graſs roots, each an ounce; Acorus, Orris and Galangal, each half an ounce; Bettony, Sage, Marjoram, Hyſop, Vervain and Maiden hair, each a handful; Roſemary, Stœchas, Lavender, Bugloſs flowers, each a pugil; Fennel and Annis ſeeds, of each two drams; Parſley, Carna and Seſeli ſeeds, each a dram; Piony ſeeds a dram and an half, Rayſons ſtoned twelve pair, Figs eight pair, Dates five pair, ſweet Prunes eight, Polypody two ounces, Senna and Carthamus ſeeds, each an ounce and an half; Agarick half an ounce, Turbith three drams,* boyl them, and add *Honey* as much as is fit, *Cinnamon two drams, Ginger a dram, Cubebs and Nutmeg, each two drams;* make an Apozem for three or four Doſes, or a ſyrup if you pleaſe.

There are things purge the Head by the Noſe and Mouth, good when flegm abounds. And theſe are beſt when the Humor was wont to paſs that way and is ſtopped. Alſo they are good in Choller and Melancholly pains, but they muſt be uſed after other Evacuations. Thoſe that cauſe Neeſing, cauſe heavineſs of Head ſomtimes: if the Head-ach be from vapors, they preſently take it away, as it doth from drunkards, whom it comes upon and takes away Head-ach. They are thus made, as in other Head diſeaſes.

A Maſticatory to chew: Take *Maſtick half an ounce, Angelica ſeeds and Nutmeg, each a ſcruple*: mix them with *Wax* or chew them in a clout.

A ſtronger: Take *Maſtick two drams, Staphiſager and Pellitory roots, each a dram; long Pepper, Cubebs and Nutmeg, each a ſcruple,* make Pouder, and with *Wax,* make forms to be chewed.

A Gargariſm: Take *Orrit, Capper and Pellitory roots, each half an ounce; roots of maſterwort two drams, Hyſop, Organ, Sage, Time, each a handful, Stœchas and Roſemary flowers, each a pugil; Muſtard ſeed half an ounce, Nettle ſeed an ounce, Nutmeg two drams,* boyl them in *Wine* and *Water,* in a pint and half ſtrained, diſſolve *Oxymel of Squils two ounces.*

An Errhine to ſnuffe up: Take *juyce of Marjoram an ounce and an half, juyce of Brooklime, Beets and Vinegar of Squils, each an ounce; Manna half an ounce.*

Or this Liniment for the Noſtrils: Take *Scammony a dram, Gith ſeeds, Pellitory and Sowbread roots, each a ſcruple; Gall of any Fiſh five drops, Oxymel of Squils:* make an Oyntment.

Or put in this Peſſary to the Noſe: Take the Medicine laſt aforeſaid, add *Orobus flowers* to thicken it, or bruiſed *Marjoram,* or *a Bees roor,* the inward being taken off, or if you will neeſe the inward part of *Hellebore,* like pith, or the Pouder of it.

It is moſt convenient to give a Vomit, when Head-ach comes from vapors, riſing from the Stomach, as in drunkneſs, for it preſently takes away the Cauſe. Therefore if nature doth not of herſelf, give a vomit, as we ſhewed in other diſeaſes of the Head, Giddineſs and Drunkenneſs. But in other caſes, when the Head ſuffereth from its ſelf, it is not good to vomit raſhly, while the Head akes violently. Becauſe by the ſtrong motion and ſtraining to vomit the Head will be ſhaken and blood ſpirits and humors ſent to it, which will increaſe the pain. But a vomit may ſomtimes be allowed out of the fit to hinder increaſe of Excrements.

Sweating is good when Head-ach comes from watery Excrements after general purging, becauſe the Excrements are drawn forth thereby, therefore in old *Cephalæas* and in thoſe pains from the French Pox they are given, to Cure the diſeaſe and Symptom, by way of Decoction with ſlender Diet, for ſome time, as we ſhall ſhew. But it is not good in a hot cauſe or Cephalalgia, becauſe ſweat cannot be raiſed without great heat which will increaſe pain.

In the extremity of Head-ach, the laſt remedy is to Evacuate by the Skin of the Head (for ſo the whol body may be cleanſed) by applying things thereto, that make great Evacuations, (thoſe that purge only the remainder ſhall be mentioned in the altering Medicines. But theſe are good in old diſperate Head-achs to draw the Excrements from the Membranes of the Brain and let them out. Theſe are very hot attracters of humors that conſume them alſo. Lixivium or Lie and Oyntments: and Cupping-glaſſes or things that inflame, or make the Head red, or burning Veſicatories that bliſter: or Cauteries that cauſe an Eſchar actually or potentially. They are applied behind in the Neck, ſuch as we mentioned in other diſeaſes of the Head.

Cutting or Trepanning in the Head, that is, taking out a peice of the Skul, to make way for the humor, is alſo a laſt remedy for old and deſperate Head-aches.

Medicines to alter are given, as in other diſeaſes of the Head, according to the humor predominating cold or hot, and ſtrengthening, and that beat down vapors if the pain come from the ſtomach, and allay Choller. Theſe are given in Diet as well as Medicine.

Firſt take heed of things that by ſcent hurt the Head, as Wine, Muſtard ſeed and the like, which in a Flegmatick caſe, would be good, and Wine alſo, which cheriſheth the Head and Cures the hurt it cauſed, hence the drunkards take a Hair with the old Dog, and till they drink Wine again are not well, or eat with it to repreſs vapors. And Milk although being corrupted it cauſeth Head-ach, yet thus drunk it abates it.

We are ſomtimes urged to give Stupefactives in great pain of the Head, eſpecially if they cannot ſleep and in a hot diſtemper. As ſyrup of Poppies or other gentle Narcoticks, as Pouder Diapapaveris. In other caſes we give not Narcoticks, or ſleeping Medicines, becauſe as we ſhewed, when their ſtrength is ſpent, they leave a Head-ach behind them, except well corrected, as Treacle or Mithtidate, or Diacodium, or *Requies Galeni,* but in a very ſmal quantity: All this may be alſo done by a large drinking of ſtrong Wine which hath alſo a Narcotick quality.

The Remedies to be applied outwardly are of three

ſorts,

ſorts, Coolers, Anodynes or Removers of Pain, or Healers. If it come from a hot cauſe, or Cephalalgia, give Coolers, and at firſt Binders, when the flowing of blood is to the Head, or is feared. and after mix moiſtening things therewith to abate the heat. Anodynes which with moderate heat not too dry cheriſh the part, or by cauſing ſleep or aſtonithment, keep the pain from being felt; when the pain is great and at the firſt, to hinder the Defluxion may be given, not ſo wel alone, as with cold mixture. Hot things which dry and diſcuſs humors and thin vapors, may be given in the declining of a hot Head-ach to take away the remainder, and fix the weakned part, firſt mixed with the aforeſaid, then alone. With theſe the Head is waſhed from an high, or Stuphes, or Clouts, or Spunges are put therein, and applied to the Fore-head and Temples, or the parts anoynted therewith, or they are applied in Bags, or Caps, wet or dry, as followeth.

When we wil cool and repell together, we apply Vinegar of Roſes thus. Take *Roſe water four ounces, Roſe-vinegar two ounces, Oyl of Roſes an ounce*: mix them, if you wil aſtringe more, add more *Vinegar*.

It is better, Thus with Juyces. Take *Roſe water three ounces, Roſe-vinegar an ounce, juyce of Oſiers and Plantane, each an ounce*; with *the white of an Egg* to make the moiſture ſtick longer. if it come from Drunkenneſs, add *juyce of Ivy*. apply it.

Or uſe this Decoction more repelling and cooling. Take *Plantane and Oſier leaves, Vine and Nightſhade, each a handful*; boyl them, to *ſix ounces* ſtrained, add *juyce of Plantane and Houſleek each an ounce an half*; *Vinegar of Roſes an ounce*: mix them.

Anoynt the Fore-head and Temples with repelling Oyntments as the Cerote or white Oyntment of *Galen* or that of *Roſes*.

Or, Take *Oyl of Roſes, juyce of Oſiers, Vinegar of Roſes, whites of Eggs, each equal parts*: beat them a good while and apply them.

Or this. Take *Oyl of Myrtles two ounces, of Roſes one ounce, juyce of four Pomegranates, Vinegar of Roſes, each an ounce; Oyl of Olives a dram, Myrtle, Barberry and Coriander ſeed, each half a dram; with Turpentine of the Larch tree*: beat them, apply it as the other.

Or this Emplaſter. Take *juyce of Willow and Vine leaves, or of Plantane in the winter and Houſleek each an an ounce and an half*; *Vinegar an ounce, with Line ſeed flour, and the white of an Eg*, make two *Plaſters* for both the *Temples*.

Galen makes a Frontal or Plaſter for the Fore-head of red Roſes ſteept in Wine, which is red and aſtringent, or in Vinegar.

Freſh and green Vine leaves and Willows applied do the ſame, and better if beaten or bruiſed or ſteept as the Roſes.

If you wil repel and eaſe pain alſo. Take *Roſe water three ounces, Plantane water two ounces, juyce of Willows, or Plantane an ounce and an half, Vinegar and Poppy flowers, two ounces, Oyl of Roſes and Violets, each ſix drams*; *whites of Egs and Mucilage of Fleabane ſeed, each an ounce*: beat them wel.

Or uſe this Cap or Frontal. Take *red Roſes two drams Violets and Water-lillies, each a dram*; *Coriander ſeed two drams, Myrtle ſeed a dram, rinds of Mandrakes half a dram, red Sanders a dram and an half, red Coral a dram*: make a *Pouder*.

To Cool and Moiſten, we uſe this. Take *Lettice, Water-lillies and Nightſhade water, each two ounces*; *Vinegar of Roſes* (to pierce and repel) *half an ounce*: apply it to the *Head*.

Apply Nightſhade alſo and Purſlane bruiſed.

If you intend to allay pain at the ſame time. Take *Lettice and Nightſhade water, each two ounces*; *the mucilage of Marſhmallows and Mallow ſeeds, each half an ounce*; *Camphire half a ſcruple*: mix them.

Or this Decoction. Take *Marſhmallow roots, Lettice and Nightſhade, each a handful*; *Houſleek half a handful, Roſes, Violets, and Water-lillies, each a pugil*; *Barley half a pugil, Line ſeed half an ounce*: boyl them in *Water*.

Or this Epithem to aſſwage pain. Take *Roſe water two ounces, Henbane water an ounce, Vinegar half an ounce, the Emulſion of fifteen Peach kernels made with the Liquors mentioned, Oyl of Roſes half an ounce*.

Or anoynt with this Anodyne. Take *Oyl of Roſes and Violets, each an ounce*; *Oyl of Poppy ſeeds, Lettice and Chamæmel, each half an ounce*; *Vinegar of Roſes two drams, Milk an ounce and an half*, mix them with the *white of an Egg*.

This is ſtronger. Take *Oyl of Violets and Roſes, each an ounce and an half*; *Oyl of Poppy ſeeds half an ounce, juyce of Houſleek and Nightſhade, each an ounce, Vinegar half an ounce*: boyl them till the juyce is conſumed, add *white and red Sanders rinds of Mandrakes, each half a dram*; *Lettice and Purſlane ſeed, each a dram*; *the Mucilage of Fleabane ſeed an ounce, Camphire diſſolved in a little Aqua vitæ a ſcruple*: with *Wax* make an *Oyntment*.

Populeon is a good Oyntment againſt pain.

Or this Cataplaſm. Take *Peach kernels and ſweet Almonds, each two ounces*; beat them, add *Starch an ounce, meal of Fleabane ſeed half an ounce, Henbane ſeeds two drams, Oyl of Roſes and Violets, each an ounce*; with *Milk* make a *Cataplaſm*.

Theſe following are only againſt pain.

An Anodine Epithem. *Milk warm from the Cow, with white of an Egg and any Mucilage*, beat them wel and apply.

Or this Decoction. Take *the broth of a Sheep or Calfs head, and boyl in it Mallows a handful, Chamæmel flowers a pugil, Lineſeed an ounce and an half, Fleabane and white Poppy ſeed, each half an ounce*; boyl and apply them.

Or theſe Liniments which may be alſo dropt into the Ears. Take *Oyl of Violets and Willows, each half an ounce*; *Oyl of Poppy ſeeds two drams*, anoynt the *Forehead* and *Temples*.

Another. Take *Oyl of Apple-bearing Nightſhade an ounce, mucilage of Fleabane ſeed, cream of Milk half an ounce*, mix them.

Of Opium theſe. Take *Aqua vitæ an ounce, Opium a ſcruple, Saffron half a ſcruple*: make a *Liniment* for the *Temples* by gentle boyling.

Or thus. Take *cream of Milk an ounce, Opium half a dram, Saffron ſix grains, burnt Ivory and Starch each a dram*; mix them, and anoynt, or add *Oyl of Violets* or *Water-lillies*.

The *leaves of Henbane, Mandrakes and Poppies* applied to the Head, take away pain by ſtupefaction, eſpecially if firſt bruiſed. Some roaſt Henbane in the Embers in a Clout and apply it. But *Rondoletius* ſaith it will cauſe Madneſs.

If we wil diſcuſs, and add Coolers and Anodynes, uſe theſe. Take *Marſhmallow roots an ounce, of Willow, Plantane, Bettony, each a handful*; *flowers of Chamæmel, Elder and Dill, each half a pugil*; *Senna three drams, Dill ſeed two drams*: boyl them in *Wine* and *Water*.

Or this Plaſter that diſcuſſeth a little. Take *Violets, and Water-lillies, each half a pugil*; *white Poppy and Lettice ſeed a dram*: pouder them, and add *Barley meal an ounce*, with *Vinegar* make a *Plaſter*.

Some make Frontals of *the Conſerves of Violets and Water-lillies* with other things.

Or,

Or thus. Take *Roſes, Violets, Dill, Chamomel flowers, each a pugil*; *Juniper berries half a pugil*: boyl them in *Milk*, beat them, add *Bean flour an ounce, flour of white Poppy ſeed two drams, Lettice ſeed a dram, Oyl of Roſes and Chamomel, each an ounce and an half*: make a Frontal.

Dill any waies applied to the Head diſcuſſeth, takes away pain, and cauſeth ſleep.

This diſcuſſeth more. Take *Oyl of Dill an ounce, Oyl of Lillies and Wall-flowers, each half an ounce*; *juyce of Vervain an ounce, the infuſion of Marygold flowers in Aqua vitæ half an ounce*; boyl away the *Juyces*, add *Capons greaſe an ounce*, and with a little *Wax* make a *Liniment*.

Chiefly the Oyntment of Alablaſter diſcuſſeth, and is good in all Head-aches without a Fever, whether they be of themſelves or from ſome other part by conſent, Thus made. Take *juyce of ſweet Chamomil four ounces, juyce of Roſes and Marſhmallow roots, each two ounces*; *juyce of Rue and Bettony, each an ounce and an half*; *Sallet Oyl a pint and an half, the fineſt ſifted Alablaſter three ounces*: ſteep, and then boyl them, and with *Wax* make an *Oyntment*: to which ſome add *Bramble berries, whites of Egs, and Rue, and the juyce of Vervain*.

The Oyntment of Dialthæa is alſo good.

And the Plaſter of Frogs or of *Vigo* applied to the ſhaved head is good if continued.

This Pouder for a Cap doth aſſwage pain and diſcuſs. Take *Coriander ſeed prepared three drams, Dill ſeed two drams, Lettice ſeed, Couchineel, red Roſes and Dill, each a dram, all the Sanders half a dram, Nutmeg two ſcruples*: make a *Pouder*.

Another that diſcuſſeth and ſtrengtheneth. Take *Coriander ſeeds prepared half an ounce, Dill ſeed a dram and an half, Chamomel, Melilot, Dill, Lavendar flowers, each a dram, Marjoram, Balm, Roſemary flowers, each half a dram, yellow Sanders a dram, Cloves half a dram*.

Theſe Amulets to hang about the body are thought proper, as a wreath or Garland of Vervain.

Or Ivy upon a Drunkards head, or a Snakes Skin, or the ſtone *Ophites*.

Some things are ſnuffed into the Noſe to alter, as Sweets not too ſtrong, as Camphire diſſolved in *Vinegar* and *Roſe water*, and ſmel too.

Or thus. Take *Camphire half a dram, Oyl of Storax a dram and an half*, which *Dioſcorides* commends, mix them: with a little *Labdanum*, make a *Ball* to ſmell too.

Or thus. Take *red Roſes and Violets, each a dram*; *Dill and Chamomel flowers, each half a dram, Coriander ſeeds prepared a dram, Lettice ſeed half a dram, all the Sanders a ſcruple*: with *Camphire half a ſcruple*, make a *Pouder*, tie it in a Clout, and dip it in *Roſe water* and *Vinegar* to ſmel to.

Or take the Fume of this Decoction hot. Take *Willows, Nightſhade, Lettice, each a handful*; *flowers of Roſes, Violets, Dill, Water-lillies, Melilot, each a pugil*; *Lettice ſeed two drams, Poppy ſeed a dram, Baſil ſeed half a dram*: boyl them, and add *Vinegar* and *Water of Roſes*.

Or ſnuff up Vinegar and Roſe water.

Or ſtupefie with this Oyntment. Take *Oyl of Water Lillies an ounce, Opium and Camphire each ſix grains*.

This is good to be dropt into the Ears alſo, and the other cooling Anodine (and hot Oyntments mentioned when you wil diſcuſs) And you may mix a little Oyl of Safiron, and Oyl of Dill, and drop it into the Ears.

Waſhing and ſtroaking downward, divert from the Head, cauſe ſleep, and abate pain, and if the Head-ach be hot, do cool it. It is made with *leaves of Willows, Lettice, Violets, Briony water, Lillies, with Mallows and Chamomel flowers, with Head herbs, as Bettony, Calaminth, Southernwood*, and ſomtimes Narcoticks, as *the heads of Poppies* boyled in *Water* with a little *Wine* or *Capital Lee*.

Alſo it is good to waſh the Face with Roſe water and Vinegar.

The cure of a pain coming from the ill faſhion of the Head.

Head-ach coming from the ill ſhape of the Head, as abſence of a ſuture, as the Arrow-ſuture or rocky conſtitution of the Skull about that ſuture or ſeam called *Sagital* is incurarable, and if you will attempt by reaſon of the great pain, uſe the Trepan to take out a piece of the Skul there.

CHAP. IV.

Of Pain in the Eyes.

The Kinds,

WE comprehend under the name of Pain in the Eyes; all Diſeaſes in the balls and corners of the Eyes, and in the inſide of the Eyelids, and we leave other pains outwardly in the Eybrows to another place. When pain is in the ſaid parts it either hath no other accident, or is with other accidents, as chiefly Redneſs, Tumor, or Inflammation in the Eye or great corner, or there is a bladder in the Eye, or unevenneſs in the Eyelids, or a corroding or excotiation, or ulcer, or wound in the Eye or Eyelids. Theſe kinds of pain are according to their accidents.

Itching, Pricking, or contraction of the Eye alone without other ſign.

Itching in ſound people coming from Wind or Watching, wil cauſe redneſs if it be rubbed. Alſo Prickings are in the Eye alone without any other hurt, or with a Head-ach called *Cephalalgia*, where the pain comes to the roots of the Eyes. Alſo ſome have a twitching pain in their Eyes after ſleep, before their Eyes are well opened, which hinders the motion of the Eyes.

A falſe Ophthalmy or pain in the Eye.

When the pain is with Redneſs and without Tumor or Inflammation, it is called a falſe *Ophthalmy*, and it is red all over, or in part, or in the inſide only of the Eylids Blood-ſhot, but the veins are not ſo ſwelled as in a true *Ophthalmy*; nor is there ſo great burning, but a cutting pain, or itching in the corners or the edges of the Eybrows, and it called *Xenophthalmia*. In this the Eyes are commonly moiſt, and the tears are firſt thin, and then thick. If they flow many and cauſe another Diſeaſe, it is called *Epiphora*, eſpecially if pain be in the Eylids, or *Taraxis* or moiſt Blear-eyedneſs, in which at length is thick matter, and the corners are foul, and the Eyelids cling together, eſpecially in ſleep, and they cannot be opened til they are clenſed. And there is ſand in the corners, and it is called the *Sclerophthalmy*. Sometimes the Eyelids ſwell outwardly, and fall and riſe. When the Eyes are red

Xenophthalmy is a kind of falſe Ophthalmy.

Epiphora is a kind of Pſeudophthalmy. Taraxis or Bleard-eyedneſs.

Sclerophthalmy a kind of Epiphora.

Xerophthalmy, is a kind of false Ophthalmy.

and dry it is called *Xerophthalmy* and is either new or of long continuance, especially an *Epiphory* in which the Ey-lids are only red and wet and the Eye little offended. This is usual in old men and drunkards, and scarse to be cured in them, nor is it troublsome except it increase and bring another infirmity by Itching and shooting, these ate called *Lippi* or bleareyed. If Eyes be red and hotter only then ordinary, without pain, as when the body is hot it fall often out we shall speak of that in Deformity, by reason of the ill-favored sight of the Ey-lids turned out.

A true Ophthalmy.

It is called a true *Ophthalmy*, when it is with a Tumor and redness, over all the white, and the Veins appear: when the Tumor is great tis called Chymosis. I have known it as big as my fist. In a true *Ophthalmy* there is great burning, so that the Eyes cannot be opened, but a true inflammation is seldom in the Eyelids.

Chymosis a sort of Ophthalmy.

Agilops.

Agilops is in the great corner of the Eye with tumor and redness, and pain of the Head, Temples and parts adjacent, and beating in the Eye. In this there is a red push in the middle, and a pricking pain, and I have seen their Ey-lids and Cheek inflamed therewith.

The blisters in the Eyes.

When there is a bladder or blister in the white of the Eye, it is red, and the part round about it. And if it be in the black of the Eye, it is not painful, but clear and shining called *Phlyctæna*. And there are other filmes and spots of that part that rather hinder the sight then cause pain.

Roughness in the Eyes.

Somtimes there is a sense of roughness in the side of the Ey-lids, especially when they are moved, and then there is commonly somewhat in the Eye, and though it be out again, yet the roughness remaines.

Scabs of the Eyes.

Somtimes in the corners of the Eyes there is a cutting and itching pain with *Excoriation* and sense of roughness. *Dioscorides* mentions it, it is often in the side of the Ey-lids,

Dry Lippitude called Xerophthalmia.

and there is a scab and it is called *Psorophthalmia*, but some call it a dry blearing, or Lippitude, or *Xerophthalmia*

Ulcers in the great corner of the Eyes.

There is often a pricking and itching pain in the great corner of the Eye, after an Egilops turned into an impostum and broken. Hence comes a simple Ulcer, that hath concocted matter, or a creeping and malignant

A malignant Ulcer in the great corner of the Eye.

called *Phagedænicum*, and the matter is somtimes Concocted and somtimes crude, somrimes it eats through the lower Ey-lid, and makes a Tumor in the Skin, which being broken, there is an Ulcer there also ful of the same matter. And when it enlarged, it is a Fistula

The weeping Fistula in the great corner of the Eye.

called *Lacrymalis* or weeping. In this stinking matter flows through the next Nostril, and tears are still in the Eyes. Somtimes the little flesh of that Eye being consumed by the long malignity of the Ulcer, there is a little hole in the bone that weeps perpetually, and I have seen some of that thin bone with stinking matter fall forth. Of this we shall speak in deformity.

Ulcers in the ball of the Eye.

There is somtimes a pain in the bal of the Eye with an Ulcer, either superficial blood red and inflamed, or deep following Inflammations, that were Impostums, this becaule it is filthy and mattery, is called *Epicauma*, and if the Lips be hard it is called *Condyloma*. This healed leaves a scar, and when it gets into the hollow of the Eye, it causeth the humors to fal out somtimes, within four daies after the Inflamation, and we have seen the Crystalline humor upon a mans beard.

Epicauma and Condyloma, what.

Worms in the Eyes.

If there be a prick or cut in the Eye there is pain, with redness, weeping and somtimes true Inflammation. And if the wound peirce through the ball of the Eye, the humors of the Eye fall out and the Eye sinkes in. Also if any sharp thing fall into the Eye, the inside of the Ey-lids may be wounded with pain and redness, as we shewed in Excoriation or rawness.

The Causes.

The Cause of all pain in any part of the Eye, is a disease in some sensible part of the Eye. For the outward skin of the Eye, is very sensible under the Ey-lids, and there are many thick Muscles about the Eye, besides which, the ball of the Eye, made of the horney Tunicle and other Membranes and ful of humors, (as we observe in the pricking of a Cataract without pain) there is no sense, except it be without in the Circumference, by reason of the Tunicle called *Adnata* for whose cause pain, goes to the Ball of the Eye. The diseases that cause pain in these parts, are either distemper or afflux of a bloody watersh humor, or solution of continuity manifest, or hidden.

A hot cold or dry distemper causeth itching or pricking in the Eye.

A simple hot distemper that yet hath caused no flux, causeth rather heat and itching then pain in the Eyes, but when pain comes there is a flux presently, as we may see in hot Diseases when they rub their Eyes, their Nose fals a bleeding. Also a cold distemper from cold Wind, especially, and the like causeth itching of the Eyes by biting. Also too much dryness makes itching and roughness in the Eyes, and therefore they who watch long either in or out of a disease, have itching Eyes, which they rubb, except heaviness of Eyes, when sleep is at hand cause this itching.

Dryness causeth roughness of of the Eye.

A hot distemper with a Flux of blood, is the cause of an Ophthalmy not true.

If there be a hot distemper in the Eyes and Lids with a Flux of bloody humor, and redness, in regard the Inflammation is not true, the *Ophthalmy* will be false and not so strong as a true, and it will be moist from the tears, proceeding from the sensibility of the part, or dry when they are wanting, from the dryness of the brain, or it is called dry and hard, if the matter be flymy and produce some thing which glueth the Ey-lids together.

Inflammation of the Eye causeth a true Ophthalmy.

But if in this Flux of blood if it flow not only into the Veins but Tunicles and Ey-lids and cause a true Inflammation, the *Ophthalmy* is called true, with greater accidents and stronger pain, with Head-ach somtimes by reason of the Connexion and consent of the Pericranium with the adnate Tunicle: and the pain is greater when the blood flows into the Muscles of the Eyes, as into the horney Tunicle or under it. And the pain is greater, as the blood is

hotter

Inflammation of the great corner of the Eye is the cauſe of Agilopy.

hotter, more Chollerick or ſharp. When this fals into the great corner of the Eye inflaming it, there follows an Egilops. The cauſe of this flux of blood into the Eyes, is Plethory or abundance, or thinneſs, ſharpneſs, or heat. When it is from plenty, it is called an *Ophthalmy*, from plenitude. Moreover if the Veins of the Eyes be diſpoſed to receive this flux, by reaſon of their largneſs having been formerly filled therewith, the diſpoſition of the Eyes is the helping cauſe. Alſo too much light which they cannot endure, who have an *Ophthalmy*, they ſcarſe open their Eyes and ſhut them ſoon. This is cauſed alſo from hot Air, and cold wind that nips the Eyes, or Smoak, or things fallen into them, for the Eyes cannot be ſafely touched by any thing, eſpecially that is rough or ſharp, as Pouders duſt or flies. And crooked hairs in the Ey-lids cauſe the ſame. Alſo hot burning things, as Pepper, or ſharp things, as Salt getting into the Eyes. Oyl and all unctious things burne, if they get into the Eyes. Great hurts or wounds cauſe a true and falſe *Ophthalmy*. And weeping either makes an *Ophthalmy* or increaſeth it, if the tears be ſharp and hot. All theſe cauſes trouble in the Eyes, if they cauſe itching, and makes men rub, this rubbing may cauſe a new Flux.

A Flux of water to the Eye, cauſeth itching and Epiphora.

A ſimple wateriſh humor, or mixt with Flgem falling into the Eyes or Lids cauſeth no great pain, if it be near to the Nature of water, but continual flux of tears and ſomtimes outward ſwelling of the Ey-lids, of this in the Chapter of Tears over-flowing. But if the humor be ſerous and partly ſalt it cauſeth ſome itching. If it be ſharp and hot then there is an *Epiphora*, that is a pain redneſs, itching and burning and weeping in one or both Eyes, (for one ſuffers often with the other) This *Epiphora*, if it be very painful, cauſeth a flux of blood and an *Ophthalmy*. Aboundance of this wateriſh humor in the heat within or without the Skul, is the material cauſe of this defluxion, and many Exérements. The efficient cauſe that moveth the defluxion into this or that part, comes from the things that provoke the Eye either to natural tears or preternatural Tumors, of this we ſhall ſpake in the cauſes of blood-ſhot and tears.

All theſe are helped by the diſpoſition of the Eyes to receive them, when they are made weak and looſe by former Fluxes, hence it is that when this diſeaſe hath long continued and theſe cauſes met, they have alwaies red and wet Ey-lids, and ſomtimes ulcers and little pain but itching.

Some ſay pains of the Eyes may come from wind, but in regard wind can no way get into the Eyes, nor ſtay there, and if it were there, it cannot dilate the thick ball of the Eye, or cauſe pain being the part is inſenſible, I cannot allow it. But without the ball of the Eye, if vapors get between the Muſcles, there is a looſneſs and a twinkling rather then pain, if they be not many, but if they be many, there may be a ſhort twiching pain before the Eyes are opened, after ſleep. As we ſhewed in the windy Cramp.

Vapors cauſe Convulſion, or Contraction of the Eyes.

Twitching of the Eye cauſeth itching roughneſs Ophthalmy and Epiphora.

Solution of continuity cauſeth divers pains in the Eye. If it be hidden and only a twiching, not yet ſeperating any thing in the Eye it cauſeth itching and roughneſs, and if it continue and increaſe pain, it cauſeth *Ophthalmy* and *Epiphora*. If the ſolution be manifeſt and the adnate Tunicle ſeperated from the Eye, it fils the part with water and cauſeth a Bladder. If the Tunicle be divided in the corners or the Ey-brows, there is Corroſion, Scabs or Ulcers. If it be deep it cauſeth a ſimple or a hollow Ulcer, or Fiſtula, or Wound. All theſe have divers cauſes. Somtimes they come from outward hurts. As ſtrong and hot rubbing, from itching cauſeth the *Phlyctænæ* and Excoriations of the Eyes. Things falling in, if they be rough, may not only exaſperate the Eye, but take of the Skin. Things that are ſharp and burn alſo, do not only inflame, but take of the Skin and cauſe *Phlyctænæ* and Eroſions, as the juyce of the wild Cowcumber. It often comes from ſtrong Medicines that are uſed to take away ſpots, and all theſe Eroſions may turn to true Ulcers. If things that prick or cut fal into the Eye, they may both diſturb and wound it, as we ſee in the couching of a Cataract, there is Inflammation. Alſo Tears, and wateriſh humors that wet and provoke the Ey, do at length corrode and cauſe Scabs in the Ey-brows, and Ulcers, as alſo diſeaſes that went before, cauſe ſolution of continuity. As *Phlyctænæ* broaken leave excoriation behind them. A true *Ophthalmy* turns into an Impoſtume, when the Inflammation will not diſcuſs, but ſupurate, which broken, there is ſomtimes a deep Ulcer. Alſo an *Ægilops* after the ſtegmon breaks, turns to an Ulcer, either ſimple or Malignant, as the blood is that cauſed the Inflammation, or hollow, if the matter be ſharp and long kept, before the Impoſtume opened, corroding within. And laſtly if the Lips by continuance of the Ulcer be hard, or grown over with a Skin, there is a Fiſtula that deſcends into the Noſe. And when the Caruncle, or bit of fleſh in the Eye is conſumed by ſharp matter or Medicines, which they uſed to heal the Ulcer; the diſeaſe called *Rhyas* follows. And the thin bone adjoyning is eaten away and loſt.

Solution of continuity, if manifeſt, is the cauſe of bladders, roughneſs, Ulcers, Fiſtulaes and wounds in the Eyes.

Rhyas, is the conſuming of the little bitt of fleſh in the Eye.

The Cure.

The Cure and Prognoſtick is according to the divers Cauſes of theſe pains.

Prognoſticks in all Eye ſores.

A Simple hot diſtemper without a Flux, that cauſeth itching and ſomtimes pricking, if it come in a *Cephalalgia*, and the pain of the Head reach to the roots of the Eyes, muſt be Cured as the Head-ach. In theſe heat and redneſs and largneſs of Veins, in a critical day foretel bleeding at the Noſe. But if the Eyes itch or be red from any other cauſe beſides theſe diſeaſes, as heat, violent motion, wind or watching, theſe cauſes muſt be removed, and the Air amended, and they are eaſily the cured.

A heavineſs of Eyes and Lids after ſleep, ſuch as wrings them, and ſuffers them not to be eaſily opened foretelleth heavineſs of head and aboundance of Vapors and Humors, theſe muſt be prevented.

If a falſe *Ophthalmy* come from a Flux of blood there is little danger, except it turn true. But if Inflammation of the Eyes follow, the true *Ophthalmy* is more dangerous, eſpecially if a great Tumor cover the black of the Eye. That is worſt which ſuppurates and turns into an Impoſthume, and ſo into an Ulcer, which if deep there is danger of looſing the Eye, alſo a

not

not suppurated Ophthalmy true or false if long of continuance, darkneth the Pupil, or leaves a spot, and causeth dimness or blindness: But the Inflammation made in the outward corner of the Eye in an Ægilops, goes sometimes soon away, but neglected suppurateth and proveth a lasting and perverse Ulcer, which turns to a Fistula and is scarse cured.

An Epiphora also is very stubborn from a watersh humor, and continues many daies or months, sometimes a whol Winter, and in old Persons all their lives.

I have known Phlyctænæ or Pearls coming of outward causes that were cleer and not red, to go away of themselves, and they which are red and painful, and break, leave excoriation behind them.

Excoriations and Scabs by reason of the moistness of the part, are not soon cured, and are worse if they ulcerate, if it turn mattery or callous, it is stubborn, and somtimes incurable, piercing the Eye, and putting it out, or covering it with a Callous or Scar.

When a Wound of the Eye pierceth the *Cornea* or horney Tunicle the humors fall out and the Eye sinks in and is blind. An outward or superficial wound turns to an Ulcer, hard or easie to be cured. A puncture causeth Inflammation if it be not looked unto.

All kinds of Eye-sores as Itching, Puncture, Ophthalmy true or false, Ægilops, Roughness, Scabs, Ulcers, Wounds, Fistulae's are cured by taking away the Cause.

As for the Cure. when any of these Diseases will not away of themselves, then have at the Causes, which either are external as hard bodies that get into the Eye, or hairs of the Eyebrows, or Air, or Light, which molesteth. Or also from things taken in, or from motion extraordinary of mind or body. or from filth or tears. If any of these Causes procure an Ophthalmy, or exulceration, or the like, or increase them, they must be removed, or amended, or prevented. But if an Ophthalmy come from a Defluxion of blood, or an Epiphora from a Defluxion of flegm or if the Eyes formerly weak have new Defluxions, then we must evacuate by opening a Vein or Artery, or cutting or burning of holes, or by Cupping, by Leeches, Frictions, or the like, or by Stool, Nose, Mouth, by Vomitting, Sweat, Urin, or derive the humor another way, and so consume it by things given or applied, and stop the flux to the Eyes by outward applications. But the cause of the Disease it self must be cured by Topicks to the Eye according to irs condition. All which shall be done as followeth by the order declared being appropriated to the Causes and to the Disease.

Things that get into the Eye, if they be thin, come out again of themselves, if they be more solid, they get out by the motion of the Eyes and Lids and tears that come from thence to wash them away. But if they stick, they must be taken out by Art.

This is done easiest when they are in the corners of the Eyes, and may be seen when the Eye is opened or the Eyelids lifted up, And then make a tent of Linnen and the like, and wipe them out.

But if they lie out of sight, or having been seen, return upon touching, or the motion of the Eye, then they must be taken out with smooth and slippery things put into the Eye, and by putting one Eyelid over the other, these are best when pouderous, as little small Pibbles or precious stones, as the Swallow stone which is made of Mamor, or the Jasper stone, or the Crayfish stones called Crabs-eyes, which seem to be made for that very purpose, to be put into the Eye, the one side being hollow or concave for the Ball of the Eye, the other convex for the Eyelid.

Rhasis saies this may be better done with a little Pensil anoynted with Turpentine, drawn through the Eye under the lid, that they may stick unto it, and so be brought forth, but this way wil presently fail by the watering of the Eye.

Sneesing or often blowing of the Nose are good to shake out, or at least to remove things in the Eye, they appear to be strongly driven through the Nose, by which the Eyes are moved, and the tears provoked to wash them out.

For which Washing other things are good that provoke tears, as of often motion of the Eye, when the Eyelids are kept open, this drives things out.

When crooked hair in the Eye-brows prick the Eyes by reason of some fire that singed or dried them, or the like, they must be cut off, and then they will grow better, if the pores be not in fault, and then if they be, they must be constantly cut, or pul'd out, or the Eyebrows burnt, which being not to be done without pain, and seeing it is not decent to want hair upon the Eyebrows, they may be set right with the infusion of Gum traganth, Mastick, or the like, as some do their Mustachoes to keep them out of their mouth, and which some take for an Ornament.

Hot Air, because it is naught for red inflamed Eyes must be tempered, or avoided, or changed, for cold Air which is good in this case: but very cold Air, especially with Wind, is hurtful in all Diseases of the Eyes. And Smoaks, especially of new quenched Lime which is sharp and pricks the Eyes, and very strong scents as Oyl of Spike, of stinking things or Jakes, all these are to be avoided in sore Eyes.

Also Brightness from flame especially, which cannot be endured, or from light at which the Patient is unwilling to look. And therefore they ought to have a black Veil before the Eye if other things are not applied to keep away light.

Meats and Drinks must be avoided, that inflame the body and make the Face and Eyes red, as strong Wine, Onyons, Mustard and Radishes. And it is good in an *Epiphora* to keep a slender Diet, and abstain from Suppers.

Also 'tis hurtful to sore Eyes to move them much, to look too stedfast upon any thing, or to read or write much, or to move the Head too much, or hang down the Head: therefore let him stand upright, and sleep with his Face upward, on the contrary side. Also it is naught to rub the Eye, from which they hardly abstain.

Also to watch long, or lament, to cause crying and shedding tears; these all must be abstained from.

And from things that are apt to get in, as dust flies. And take heed what midicines are used, lest they be too sharp.

Also remove other Impediments as glewing of the the Eyelids together which is painful when they are opened, the glew therefore slime or sand must be gently taken off with the hand, and Rose water if need be, in which some Mucilage or white of an Egg is.

Other filth that is in the Eyebrows before the Pupil especially to hinder the sight, must be gently thrust to the corners, and there taken out.

When tears flow, the less you wipe your Eyes if they be sore, the less you wil offend them, but if you must dry your Eyes, do it gently by pressing not wiping.

Blood-letting is good against sore Eyes if the pain comes from flux of blood thither, as in an *Ophthalmy* and *Ægilops* and in an Ulcer or Wound, when we fear a new flux of blood by reason of pain, especially if there be

Inflammation

Inflammation, and Plethory or fulneſs, then they muſt bleed much, and often in the ſame or divers veins. the Shoulder-vein in the Arm is opened for Revulſion or that which appears moſt, on the ſame ſide the Eye is ſore while blood flows to the Eye according to the *Arabians*. alſo in the Thumb or Foot; ſome open that between the Shoulder-blades. When we intend to fetch the blood and derive it from the part where it is, we open nearer veins, as in the Forehead, Temples, or under the Tongue. Or ſome wil in the fore part of head. And it is good to take blood from the Noſe any waies.

As we ſhewed in Head-ach opening of an Artery is excellent againſt an Opthalmy or great old pain of the Eyes, or an Epiphora which hath continued long: for when the ſerous humor deſcends by the outward Veins which cauſeth weeping there is a certain Cure.

Paracenteſis or a Seton or opening of the skin of the Head at the root of the hinder part, and ſo putting a skein of Silk or Hair through it to keep it open, is the laſt Remedy in an Epiphora to divert the flux.

In a long flux whether Epiphora, or Ophthalmy, or the other, it is an excellent way to burn or cut an Iſſue in the Neck oppoſite againſt the ſore Eye, or in the middle of the Nape, or in the coronal ſuture of the Head.

Cupping-Glaſſes are good in all fluxes, whether blood or water in the Eyes, alone or with Scarification, eſpecially if it be blood, they muſt be applied to the ſides of the Neck upon the Shoulders and Arms, and repeated often if need require, for they revel and derive mightily. Some highly eſteem of Scarifying of the Ears on that ſide the Eye is ſore,

I ſhould like of better the making an Iſſue in that part of the Ear which the Greeks call Τράγος the Latines *Hircus* or Goat, and the ſame is excellent in an old Tooth-ach.

Leeches applied in Head-ach are as good as other bleeding.

And Friction of the body to revell.

Alſo to looſen the Belly with Clyſters or Suppoſitories to cleanſe the Guts before bleeding, or with Laxatives is good. Theſe revell alſo if often given, they may be made more mollifying or ſharper as you pleaſe as we ſhewed.

Alſo light purging to take away the binding of the Belly which hurteth the Eyes, and to take away the firſt excrements, muſt be given in all caſes, as in Inflammation leſt ſtinking vapors ſhould offend, but we muſt take heed of hot things in them, without cool to temper them. Theſe are alſo good in a falſe Ophthalmy which hath no inflammation but heat and redneſs, in which ſtronger may be uſed, eſpecially in the progreſs of the Diſeaſe when tears begin to moleſt. Examples of theſe are in cholerick Diſeaſes and in Head-ach from a hot cauſe, but add to them alwaies things proper for the Eyes.

Prepare firſt thus. Take *ſyrup of Violets an ounce, ſyrup of Water-lillies and of red Roſes dried, each half an ounce; with Vervain, Roſe and Plantane water* make a *Julep*, dtink it often.

Then purge thus. Take *ſyrup of Roſes an ounce and an hal, ſyrup of Violets an ounce, Diagridium two or three grains*: with *Endive* and *Roſe water* drink it.

Or, Take *ſyrup of Roſes ſolutive with the Infuſion of Senna* (which is thought proper for the Eyes) *an ounce and an half*: drink it with *Whey*.

Or, Take *Caſſia an ounce, Electuary of juyce of Roſes two drams*: with *Sugar* make a *Bolus*, or give it in *Bugloſs water*.

Or, Take *Rhubarb four ſcruples, yellow Myrobolans a dram*: ſprinkle them with *Wine* to take out the ſtrength, then infuſe them in *Roſe* and *Violet water*: ſtrain them and add *ſyrup of Roſes an ounce*.

Or this Decoction. Take *Fennel roots half an ounce, Cordial flowers a pugil, Fennel ſeeds half a dram, Violet ſeeds a dram, Tamarinds an ounce, Prunes ſix, yellow Myrobalans three drams, Senna two drams*: boyl and diſſolve *ſyrup of Roſes or Violets half an ounce*.

The Pill *Sine quibus* (proper for the Eye) doth the ſame in half a dram.

If water flow to the Eyes and tears fall, we uſe ſtronger purges, and hotter, eſpecially in Epiphora or Ophthalmy when the humor is not ſo hot, and in Ulcers with Fluxes, as in the weeping Fiſtula: they are almoſt the ſame preſcribed in melancholick and flegmatick Head-ach.

A Preparative. Take *Honey of Roſes an ounce, ſyrup of Bettony and Maiden-hair each half an ounce, with Celondine, Bugloſs, and Succory water, and a little Sanders* give it, and repeat it.

Or When a Flux is more than heat. Take *ſyrup of Hyſop an ounce, of Stœchas and Bettony each half an ounce; with Fennel, Vervain, and Eyebright water*, make a *Potion*.

Then purge with cooling Purges while redneſs and heat remain, but if Flux and tears are moſt, uſe things to purge flegm, and if the Diſeaſe be old, Epiphora or Ophthalmy, or Ulcer, repeat them often.

Theſe are the beſt Pils of *Fumitory, Sine quibus or Lucis majores a dram of either, with Eyebright, Vervain, or Fennel water, or ſyrup of Stœchas*. Or *Pil cochie or Aggregative* may be given.

Or *Diacarthamum, Diaphœnicon*, or our *Diacaryon* and other purgers of flegm and water with proper waters for the Eyes.

Or this Decoction. Take *Fennel roots an ounce and half, roots of Calamus and Liquoriſh, each an ounce, green Fennel, Eyebright, Vervain, Celondine, Fumitory, each a handful; Rue half a handful, flowers of Roſemary, Stœchas, and Roſes, each a pugil; Fennel ſeeds and Siler montane, each two drams; Senna two ounces and an half; Carthamus ſeeds bruiſed two ounces*: boyl, and infuſe in it hot *Agarick three drams, Rhubarb two drams* (this is uſed in watry fluxes) *Spikenard half a ſcruple*, ſtrain them, and with *Cinnamon* and *Sugar* give it three mornings.

If this purgeth not ſufficiently, give Pils.

We have ſhewed fit Purges for the Eyes in the Cure of flegmatick humors in the Brain, producing weakneſs of ſight.

And how the Head and Stomach is after to be ſtrengthened.

In a hot Cauſe it is not good to purge by the mouth or Noſe, for that wil inflame them, and cauſe bleeding and inflammation of the Eyes, nor ſneeſing which makes the Eyes red and weeping. In other caſes when Tears are without Heat, or from Ulcers, things to chew called *Maſticatories*, or Gargle called *Gargariſms*, draw Humors to the Mouth, by the Noſe, from the Eyes: And ſo the Head is purged, and the Flux ſtopped, after other Purgings. Theſe may be done by Errhines, or things to ſnuff, but that by Sneeſing, they diſturb the Eyes, for tears flow Naturally and preternaturally from the Eyes, through the Noſe, and it is good to help it.

Sore Eyes are not to be cleanſed by Vomit, for by ſtraining, the Blood flows to the Eyes, and Tears are produced, and the Cauſe is increaſed or renewed, and the Pain alſo.

Sweating is not good in hot Diſeaſes of the Eyes, becauſe the Eyes would be inflamed more by it, But if there be Ulcers without heat, and tears then Sweating

is good to dry the body and consume Excrements, and it may be often with sparing Diet.

In the declining of an *Ophthalmy* Baths are good to consume the reliques, and wine, though both are nought at first while the Eyes are hot.

It is good to provoke Urin to take away the cause and waterish humors. Therefore in Fistulaes of the Eyes, we give drinks that dry and provoke Urin.

Thus: *Tansey, red Coleworts, Agrimony, male Fearn, Dropwort, burnet, Ceterach, each a handful, of Myrrh half a handful, roots of Liquorish an ounce, red Pease two pugils,* boyl them, take it for five draughts, sweeten it with *Sugar*, give it for the weeping Fistula of the Eye.

We use things to consume the humors in the Head, in an Epiphera and Ulcer in the Eye. These dry and strengthen the Head inwardly and outwardly, such as we prescribed in diseases of the Head. Some are good to be lookt upon, and to be carried about, as in an *Ophthalmy* it is good to look upon an Agate; and to carry a Dock root dig'd up in the Moon increasing, and to put the stone found in the Gall of an Ox into the Nose, as some think.

We stop the humor flowing to the Eyes, whether it be blood or water by the passages, and by coolers to strike them away, in an *Ophthalmy* or beginning of an *Ægilops* and in an *Epiphora*, and in other causes when a Flux is feared. They are applied near to, or upon the Eye, being first closed.

To the parts near which humors flow we apply these on that side the pain is, over all from one Ear to another, if both Eyes suffer. Somtimes down upon the Cheeks. They are good in an *Ophthalmy* to asswage the force of the blood, appli'd upon the jugulars. And they are such as astring and dry and cool, and they are safer near then upon the Eye.

Epithems made of a cloth strained, from convenient Liquor or a Spunge spuceezed that more get into the Eye are good in a true *Ophthalmy*, or in great heat. They repercuss more, when they are actually cold; but very cold as Snow must not be used, for it may hurt, and as I knew, make blind. They are mentioned in hot diseases of the Head. Only leave out Oyls and Vinegar which hurt the Eyes. These may be applied to the Forehead or jugulares, and mixed with very cold things.

An Epithem of juyce of Plantane with the white of an Egg is good.

Emplasters, because they stick long and fal not into the Eye, may be applied to the said places. And renued every third day if need be. As in other Defluxions.

Or thus: Take *Mastick, Frankincense, Varnish, each two drams; Starch or finer Flour a dram, with the white of an Egg and infusion of Gum Traganth*: make a Plaister.

Another: Take *Pitch and Oyl of Myrtles, Varnish, Frankincense*: make a Plaster, this is good to the nape also.

Or this Astringent: Take *Bole half an ounce, Dragons blood, conserve of Sloes, each two drams; Pomegranate peels and Galls, each a dram*; make a Pouder, *and with the white of an Egg and red Vinegar*: make Emplasters for the Forehead and Temples.

A better: Take *Bole, burnt Chalk, Blood-stone, each two drams; Vitriol half a dram, Asphaltum, Frankincense, Mastick, Varnish, each a dram and an half; Dragons blood, Conserve of Sloes, Acacia, Pitch, each a dram; flowers and peels of Pomegranats, Galls, Cypres nuts, each half a dram*; Pouder them, and add *Starch half an ounce, with infusion of Gum Traganth, the yolk of an Egg and Vinegar and Oyl of Roses*: make a mixture.

Or a Plaister of *Mastick*, or that for the *Rupture*.

Some stop Fluxes *with a scruple of Opium* in one Plaster, and if there be Head-ach we allow it to help, and for *Poppy seed* instead of *white Poppy seeds*, we mix *syrup of Poppies*.

The ordinary defensative is of *Bole, Vinegar and whites of Eggs*, this applied behind the Eares, is good also in an *Ophthalmy*.

Of these with Oyls, you may make Oyntments to anoynt about the Eye, especially if it swel they must be thick, that they may stick and not fal into the Eye, and used at nights when the Eyes are shut.

Such may be made of juyces without Pouders, least when the Oyntments are dry they fal into the Eyes: Take *juyce of Plantane two ounces, red Vinegar an ounce, white Vitriol a scruple, Dragons blood, Acacia, Hypocistis or conserve of Sloes, Labdanum, each half a dram*; dissolve them, and add *white of an Egg and Oyl of Roses and a little Turpentine*.

Somtimes they are applied upon the closed Eye and Lids, for these are too strong to be put into the Eyes, and Astringents which would make Eyes rough, which ought to be smooth.

Or thus: Take *fat Bole three drams, Barley flowers an ounce and an half, infusion of Gum Traganth in Myrtle or Rose water an ounce, Camphire half a dram, with Cream and juyce of Plantane*, to keep it moist, make an Emplaster, apply it to the closed Eye.

Coolers do the same, as we shall shew for stopping of blood at the first and after in stopping of Tears.

Topicks in all kind of sore Eyes.

Topicks or Medicines applied to the Eye. Or put in to it, are either Simple waters, or mixed with others, called *Collyria* are in form of Troches to be at hand for use: and they may be dropt in, injected or put into the great corner of the Eye or upon the Ey-lids. Some have a Silver and Bone Pen, which they rowle in wet Pouders and put into the Eye, then they close the Ey-lids and draw it through leaving the Pouder behind. Somtimes we blow very fine Pouders into the Eye, ground upon a smooth stone, or a little Plaster upon the great corner and the Nose. And others by way of Fomentation. these are divers in respect of the Cause and distemper, if from heat, cold, drouth, or in respect of the Flux of blood in an *Ophthalmy*, or *Ægilops*, or of water, as in an *Epiphora*, or in respect of wounds, as in a *Phlyctæna*, Excoriation, Ulcer, Fistula.

The Cure of itching or pricking in the Eye.

A simply hot distemper without Flux that causeth only itching, is cured by preventing a Flux with Cold and astringent things.

If they itch, and wax red from cold, add sharp things. These shall be mentioned in *Ophthalmy* and *Epiphora*.

If they itch, or are rough from dryness of the Ey-lids use Anodynes, and the Vapors of hot water into the Eye.

The Cure of Contraction in the Eye.

If the Eyes be heavy after Sleep, or contracted, open them by degrees and rub with a warm hand.

The Cure of true and false Ophthalmy.

If an *Ophthalmy*, true or false, be with a Flux of blood, with or without Inflammation, then use Topicks, first to allay pain and stop Flux, then to dry and after to degest, and last of all to discuss the reliques. Thus,

You must take away pain at first, not only because it is troublesom, but because it will bring a Flux, and also

cool

cool and ſtop and allay the heat; uſe this or that as the pain or Flux moſt requireth.

Thus: Apply the white of a new laid Egg, beat to a froath, to take away pain by it ſelf, or with others. Or that liquor that ſweats out of a roſting Egg, or the yolk alone or both together roſted. The white boyled hard and beaten with Roſe water, and applied like a Pultis doth beſt take away pain and heat.

And all ſorts of Milk, eſpecialy Womens, are Anodyne.

Alſo Freſh Cheeſe, doth the ſame.

Or Veal new waſhed and applied, is a brave Emperical Medicine.

Or the Papp of ſweet Apples roaſted, ſome think rotten Apples beſt. The Mandrake Apples, or love Apples do the ſame againſt pain, but to ſtrike back the Flux uſe ſharp Apples and Pears or Quinces, as the former.

Houſleek, Purſlane, Nightſhade, Henban, Mandrakes green, and bruiſed or heated in a cloth, take away pain, when applied. If you will bind, apply Plantane, Bramble and Mirtle leaves beaten or boyled. It is good to add Barley meal or bran to them, all to make them ſtick.

Roſe water is in great uſe to cool, and if we will aſtringe, take the water of the green cups of Roſes or of Plantane, Self-heal or Myrtle, or if you will abate pain uſe water of Purſlane, Nightſhade, or Strawberries, or the water of hard whites of Eggs.

When we will take away pain and heat together.

Firſt: Take *the white of an Egg, with Roſe water and Milk*, beat them. And if you uſe the Decoction of *white Poppies*, 'tis better.

The ſecond: Take *Fenugreek ſeeds half an ounce, white Poppy ſeeds two drams*: boyl in *Roſe water*, and add *the white of an Egg*.

The third: Take *crums of Bread* ſteept *in Roſe water or Milk*; apply it or drop the juyce of it.

The fourth, Uſe *ſweet Apples*, ſo boyled. Or *Bread and Apples*.

The Chirurgions apply a Pill of *Elder* ſteept in *Roſe water*.

Another Anodyne: Take *Mucilage of Fleabane, Quinces, Fenugreek, Gum Arabick, or Traganth*, diſſolve it with *Roſe water and Milk*.

If pain be great: Take *Mucilage of Fleabane ſeed and Fenugreek, each an ounce*; *infuſion of Gum Traganth*, made in *Roſe water, whites of Eggs, each half an ounce*; *Camphire five grains, Opium two grains, Saffron a grain*.

Or this Emplaſter: Take *crums of bread* ſteept in *Milk, Pap of ſweet roaſted Apples and Barley meal, each an ounce and an half*; *Mucilage of ſeeds of Fleabane and Fenugreek, each an ounce*; *two yolks of Eggs, Camphire half a dram, Saffron three grains, Opium two grains, Oyl of Roſes, ſweet Butter, or Cream ſix drams*, the Unctious things are to keep the Medicines from being dry) make a Cataplaſm and put to the cloſed Eye. Some apply it to the Forehead to eaſe pain, or mix cooling juyces, as of *Purſlane, Nightſhade*, if heat be great.

Or this Anodyne of *Dioſcorides*: Take *the yolk of an Egg roaſted and with a little Saffron and Oyl of Roſes*, apply it to allay pain.

Or this: Take *juyce of Chamomil and Melilot, each half an ounce*; *Womans Milk and whites of Eggs, each two ounces*; *Roſe water an ounce*, beat them, and wet a clout for the eyes, *two grains of Opium* added, will allay pain.

Or this Decoction to foment: Take *flowers of Mallows, Violets and Roſes, each a pugil*; *Chamomil and Melilot flowers, each half a pugil*; *Fenugreek ſeeed an ounce, Linſeed and Fleabane ſeed, each two drams*; *white Poppy ſeed a dram*, boyl them.

An Anodyne Cataplaſme: Take *Chamomil and Melilot flowers, each a pugil*; *Fenugreek ſeeds an ounce*, boyl them, and ſtrain, add *three ounces of crums of Bread, two yolks of Eggs, and a ſcruple of Saffron with a little Milk*; make a Cataplaſme.

When you deſire rather to repel and aſtring then cool: Take *Roſe cup water two ounces, juyce of Plantane an ounce, whites of Eggs half an ounce*, mix them, *the juyce of Bramble berries* added, doth repel alſo, if dryed.

An aſtringent Decoction: Take *Plantane, dryed red Roſes, each a dram*; *flowers of Pomegranats two drams*, boyl them in *Roſe and Plantane water*.

When you will aſtring and alſo take away pain: Take *Plantane, Purſlane*, (or Houſleek in Winter) *Nightſhade, each half a handful*; *Roſe and Violets, each half a pugil*; *Fleabane and white Poppy ſeed, each two drams*; boyl them in *Water, and two drams of Mandrake roots*, will allay the pain ſooner.

Or this Cataplaſme: Take *Pap of ſower Apples or of Pares or Quinces*, boyled in *Roſe and Plantane water*, or the aſtringent Decoction mentioned, or *Wine* as *Galen* preſcribeth, make a Cataplaſm.

Or this: Take *the Pap of boyl'd Quinces, or the other two ounces, Barley flowers an ounce, Sumach and Pomegranate peels, each a dram*; *with the juyce of Purſlane, Houſleek and Plantane*: make a Cataplaſm.

Somtimes ad dryers, to the ſaid repellers and Anodynes to conſume moiſture, and when the heat is decreaſed and the diſeaſe, increaſe the quantity, and add digeſters.

Eye-waters are madee of white Ceruſs, thus: Take *Ceruſs waſhed with Roſe water two drams, Plantane* (or *Myrtle water*, if you will repel, or *Womens Milk*, if you will aſſwage pain) *two ounces, whites of Eggs half an ounce*, mix and apply them.

Or: Take *waſht Ceruſs two drams, Mucilage of Fleabane and Quince ſeed, or Line, or Fenugreek ſix drams with Roſe water and Milk*.

The white Troches of Ceruſs to make eye waters, are thus made: Take *Ceruſs waſht half an ounce, Starch two drams, Gum Traganth, infuſed in Roſe water half a dram*: make Troches. If pain be great, add *half a ſcruple of Opium*, diſſolve theſe in *Water* and *Milk*, when you have occaſion.

Add Sarcocol when you will digeſt, as in the Troches of *Rhaſis*: Take *waſht Ceruſs ten drams, Sarcocol ſteept in Womans Milk three drams, Gum Traganth a dram, with Roſe water*, make Troches, *with a ſcruple of Opium*, if you pleaſe.

Somtimes add Camphire: As, Take *waſht Ceruſs two drams, Starch a dram, Mucilage of Fleabane, Fenugreek or Linſeed, each half an ounce*; *Sarcocal ſteept in Milk a dram, Camphire a ſcruple, Roſe water two ounces, Milk and whites of Eggs, of each half an ounce*; add *ſix grains of Opium, or Decoction of Poppy, or Henbane, three or four grains of Saffron*, in the increaſe of the Diſeaſe. 'Tis counted a Correcter of Opium, and will make the water yellowiſh.

Tutty is proper for the eye, and makes a good water, it is burnt and waſht for that purpoſe: or thus, waſh it in cold water, Pouder it, and ſteep it in juyce of Quinces or in a Quince, and in a clout bake the Quince, and then infuſe it in white Wine Vinegar, then dry and Pouder it, and put it into Roſe water. After Water, Make it to fine Pouder for your uſe.

It is thus uſed. Take *Tutty prepared half a dram, Roſe water an ounce, whites of Eggs beaten half an ounce.*

With Camphire thus. Take *Tutty prepared a dram, Camphire four grains, Plantane, Roſe and Fennel water, each an ounce:* mix them. *a ſcruple of Sumach* will make it ſtronger, *half a dram of Sugar candy* is good in the height of the Diſeaſe.

Galen makes a white eye-water with Ceruſs thus. Take *Tutty waſhed four drams, Ceruſs a dram and an half; Starch and Gum Traganth, each a dram:* with *Rain-water* make an *Eye-water*; add *a dram of Opium* in pains.

Or thus. Take *Tutty prepared a dram and an half, Ceruſs water a dram, Starch half a dram, mucilage of Fœnugreek ſeeds half an ounce, Fennel water an ounce, Roſe water two ounces, with half a ſcruple of Camphire.*

In great pain a yellow Eye-water is thus made. Take *Tutty burnt and waſht in womans milk half an ounce, Ceruſs wa ſht an ounce, Gum Traganth a dram, Saffron two drams, Opium half a dram,* with *Rain-water* mix them, uſe it with the *white of an Egg.*

The *Oyntment of Tutty* or *Nihili* are good for the Eyes alſo.

Or thus. Take *Butter, or Hogs greaſe, or Oyl of Roſes, well waſht, or new, with white Wax or Oyntment of Roſes or of Alablaſter an ounce, Tutty prepared a dram and an half, Pompholyx half a dram,* mix them, *Camphire a ſcruple, Antimony half a ſcruple.*

When we wil digeſt as in the beginning of the declination uſe theſe.

The yellow pouder of Sarcocol of *Rhaſis.* Take *Sarcocol five drams, Aloes waſht in Roſe water a dram, Tragacanth half a dram, Opium half a ſcruple, and Saffron ſix grains.*

Roſe water, or Milk, or both having Frankincenſe quenched in them, is good for the ſame.

Or this Eye-water. Take *Frankincenſe half a dram, Sarcocol a dram and an half, Aloes half a dram, Saffron half a ſcruple, Mucilage of Fœnugreek ſeeds half an ounce, Eye-bright and Roſe water, each an ounce and an half,* with *Fennel water* in the declining of the Diſeaſe.

The Eye-water of *Rhaſis* digeſts alſo and ripens. Take *Frankincenſe five drams, Sarcocol and Ammoniacum, each two drams and an half; Saffron a dram,* with *juyce of Fennel* apply it.

When we wil dry more if there be pain, uſe this of *Galen.* Take *Frankincenſe and Tutty, each five drams; Ceruſs ten drams, Gum Traganth and Opium, each a dram and an half:* make it with *Rain-water,* ſomtimes he ads *Pompholyx.*

To dry and digeſt. Take *Sarcocol a dram and an half, Tutty prepared a dram, Aloes a ſcruple, Myrrh a ſcruple, Mucilage of Fœnugreek ſeed half an ounce, Vervain water two ounces, Fennel water an ounce.*

If heat remain. Take *Sarcocol four drams, Tutty prepared two drams, Aloes a dram, Sugar candy a dram and an half, Camphire four grains, Saffron three grains, Roſe water four ounces:* mix them and ſhake often.

In red Itching Eyes. Take *Tutty prepared half a ſcruple, Aloes and Sugar, each five drams, Camphire two grains, white Wine and Fennel water, each two ounces:* mix them.

To diſcuſs the remainder in the declination uſe

This Fomentation. Take *Eyebright and Pennyroyal, each a handful; Chamomel, Melilot flowers, and red Roſes, and Oat chaff, each a pugil: Fœnugreek ſeed two drams, Fennel ſeed a dram:* boyl them, add a little *Wine,* dip *Clouts* and apply to the Eyes. The Fume of the Decoction is alſo good.

Or this Cataplaſm. Take *Southernwood a handful, Chamomel flowers a pugil, Fœnugreek ſeeds an ounce, mucilage of Fœnugreek ſeeds an ounce, Fennel ſeeds a dram, Cummin ſeeds half a dram:* boyl and bruiſe them, add *Bean flower an ounce, mucilage of Fœnugreek and Line ſeeds each half a dram; Saffron a ſcruple,* with *Milk* make a *Cataplaſm.*

To ſtrengthen the Eye, uſe aſtringent Wine and Fennel water laſt of all.

A roaſted Egg or Apple laid hot to the Eyes takes out the remaining redneſs.

If the Inflanumation Impoſthumeth it muſt be ripened with a Plaſter upon the Eye thus. Take *Marſhmallows a handful, Chamomel flowers a pugil:* boyl them in *Milk,* beat and add *Barley meal and Fœnugreek ſeeds, each an ounce;* with *Oyl of Chamomel* make a *Cataplaſm.*

The Eye-water of *Rhaſis* and Oyntment of Tutty doth the ſame.

When the Impoſthume is broken, cure the Wound as followeth.

The Cure of an Ægilops.

If an Ægilops come from cholerick blood in the great corner of the Eye, you muſt apply things uſed in the Ophthalmy if there be an Inflammation that repel and take away pain, and then diſcuſs the Tumor with eye-waters there mentioned which dry and digeſt, before it come to ſuppuration, which is ſooner when there is little or no inflammation, and the Tumor came by degrees.

A Diſcuſſer. Take *Plantane, Mallows, Chamomel with the flowers:* bruiſe them and with *kernels of old Walnuts,* make a *Cataplaſm* for the corner of the eye. if you add a little *Salt* and *Hen-dung* it wil be better.

The herb Ægilops bruiſed is good alſo according to *Dioſcorides.*

Others uſe Emplaſter *Diapalma, Divinum,* and *Ceroniacum.*

If the Tumor impoſthumate it muſt be preſently opened, leſt the matter retained corrode and cauſe a hollow Ulcer. Then Cure the Ulcer as we ſhal ſhew in Ulcers.

The Cure of Epiphora.

If there be an Epiphora from a wateriſh humor falling upon the eye-lids chiefly, with redneſs, Heat, and Itching and pain, we muſt at the firſt ſtop the flux, and abate pain and itching with medicines mentioned in Ophthalmy, and with thoſe we muſt mix afterwards things that dry up moiſture, which is pleritiful in this caſe, and uſe eye-waters of Ceruſs and Tutty there mentioned.

When *Epiphora* laſteth long, and there is a weeping, itching and redneſs without burning we muſt uſe ſtronger Dryers.

As againſt Itching. Take *Antimony prepared half a dram, Roſe and Fennel water each two ounces;* uſe it ſtrained.

A Pouder. Take *Lapis Calaminaris a ſcruple, Tutty prepared a dram, Coral and rinds of Myrobalans torrefied or parched, each a ſcruple;* make a *Pouder* for the *Eye.*

Or this. Take *Antimony prepared half a dram, Tutty prepared a dram, Coral three drams, Pearl two ſcruples, the cryſtal humor of the Eyes of boyled fiſhes half a ſcruple:* make a fine *Pouder.*

An eye-water of Blood-ſtone. Take *Blood-ſtone, Antimony waſhed, each a dram; Tutty prepared two drams, Lapis Calaminaris a ſcruple, Aloes a dram, Camphire a ſcruple, burnt Stones of Myrobalans half a dram, Pomegranate-wine two ounces, Roſe water four ounces.*

To digeſt alſo. Take *Antimony waſht, Tutty prepared each a dram; Myrrh, Aloes, each a ſcruple; Saffron half a ſcruple:* diſſolve them in *Fennel* and *Eyebright water* with a little *Wine,*

Uſe

Uſe Fumes alſo of ſuch things as dry without biting or ſharpneſs, as of Frankincenſe, Pitch, and the like, but be wary.

A Fume of boyled Salt, drieth well, without any biting.

Then are ſtronger drying eye-waters of ſharp Juyces to be uſed, when the *Epiphora* is ſtubborn, and itcheth much, which is helped with ſharp things which exaſperate pain in other Diſeaſes.

As a little white Vitriol diſſolved in Roſe water, it is good in Itching, and Redneſs, and Heat, the Germans call this *Augstein*, ſome apply a little of it in Inflammations, the Chymiſts uſe a drop of Oyl of Vitriol in Water, others the Salt of white Vitriol in Water.

Another. Take *white Vitriol half a ſcruple or twelve grains, Tutty prepared half a dram, whites of Egs hard four*, in a *Clout* bruiſe them, adding by degrees *Roſe water four ounces:* make *Philtration*, uſe this *Water* cold to the eyes.

Another. Take *white Vitriol half an ounce, whites of Eggs fifteen, water a pint:* mix and boyl them, then in a Glaſs, add *Camphire tied in a clout one dram.*

Or thus. Take *white Vitriol two grains, Camphire four grains, Tutty prepared half a ſcruple, white Pompholyx ſix grains, Roſe water an ounce, Fennel water an ounce*: make an *Eye-water.*

Or: Take *white Vitriol two drams, Camphire half a dram, Tutty prepared one ounce, Aloes a dram, Sugar candy two drams*: make a *Pouder*, mix it with *Roſe, Fennel, Vervain, Celondine water*, and a little *Wine.*

If you fear burning, add Narcoticks: as, Take *white Vitriol, Tutty each a dram; Nutmeg half a dram, Sugar half an ounce, white Wine two ounces, Celondine water a pint*: boyl, ſtrain, and keep them for your uſe.

Or thus. Take *white Vitriol half a dram, Camphire a dram, Tutty prepared two drams, Ginger, Cloves, each half a dram*; pouder them, and add *old white Wine* in which *a Gad of Steel* was quenched *an ounce, Roſe water, Fennel, and Celondine water each two ounces*: boyl or ſteep, and then ſtrain and keep them for your uſe.

An Eye-pouder. Take *white Vitriol half a ſcruple, Camphire a ſcruple, Tutty two drams, Pompholix, Ceruſs, Lapis Calaminaris, Coral, Mother of Pearl, rinds of yellow Myrobalans each half a dram; Aloes, Myrrh, each a ſcruple; Sugar candy a dram, Ginger, Cloves, each a ſcruple*: make a *Pouder*, and put a little thereof into the *Eye.*

An experienced Oyntment. Take *Verdegrece twelve grains, Camphire a dram, Tutty prepared half an ounce, freſh Butter with Roſe water boyled a little, ſix drams*: mix them for an *Oyntment*, put as much as a Peaſe in the corner of the *Eye.* and anoynt the *Ey-lids.* This is a ſingular experiment againſt *Epiphora* and *Itching.*

A Verdegreece water very excellent. Take *a Barbers Baſon and anoynt it with Honey, and turn it with the mouth downward upon Sheeps Dung for fourteen daies, and keep ripe Bramble berries in a Glaſs cloſe ſtopt in a Horſe Dunghil, after fourteen daies waſh the Baſon with the Bramble berries, and ſtrain the Berries*, and mix with the *Liquor* a little *Camphire* and *white Vitriol.*

Another. Take *a Baſon*, put therein *ſix ounces of Bramble berries, Salt two ounces*, one above the other in rows, keep them in a *Celler three weeks*, then ſtrain the *Liquor* from them, and let it ſettle til the *Salt* be at the *bottom*, and pour it off, and do the ſame the ſecond time til no *Salt* remain, put this *Water* into a *Tinn Veſſel* that it may be ſweet kept for your uſe.

The Cure of the Bladder in the Eye.

If the tunicle of the eye called *Adnata* ſeparated from the *Cornea* raiſe a Blifter full of Water, whence cometh alſo pain and redneſs, the pain muſt be abated, the humor ſtopt, and the Flux dried, as in *Epiphora*, and by the medicines mentioned in *Ophthalmy.* If it break and leave a Corroſion, it muſt be cured as a Corroſion, with medicines that dry without biting, mentioned in *Ophthalmy* and *Epiphora*, and ſuch as we ſhal ſhew in Ulcers.

The cure of roughneſs, and taking off the Tunicle of the Eye.

If after the tunicle of the Eye is taken off, there follow a roughneſs of the eye-lids, and there be alſo redneſs, heat, and pain, we uſe the ſame Remedies mentioned in *Ophthalmy*, then we dry ſtrongly if it cauſe no pain, with things mentioned in *Ophthalmy* increaſed, and ſhall be mentioned in Ulcers. Or with theſe.

Tutty prepared with *juyce of Quinces* and *Vinegar* and laid in *Pouder* upon the eye-lids, cures the Scabs and Roughneſs.

Or this Pouder. Take *Tutty prepared a dram, Eggſhels ſteept in Vinegar half a dram, Cuttle bone a ſcruple*: make a *Pouder.*

A third Pouder. Take *Tutty prepared a dram, Pumice ſtone half a dram, Coral burnt and waſhed a dram*: make a *Pouder.*

An Oyntment. Take *Tutty prepared, Acacia, each a dram; Blood-ſtone and Antimony, each half a dram*; mix them with *Gum Traganth*, or *Honey*, or *Pomatum*: anoynt the *Eye-lids.*

Another: Take *Tutty prepared, Ceruſs waſht, Marchaſites quenched in Vinegar, each a dram; Hypociſtis, Frankincenſe and Antimony, each half a dram; burnt Ivory, Pumice ſtone and Cuttle bone, each a ſcruple*; Poudet them.

After, uſe ſharp Medicines.

The Remedy of *Dioſcorides.* Take *Juyce of Onions and burnt Ivory equal proportions.*

Another: Take *the Gall of a Tench, or other Fiſh, and Cuttle-bone equal parts.*

Dioſcorides uſeth the *Milk of Figs*, but becauſe it ulcerateth, *Tutty* and other Driers muſt be added.

Uſe alſo the Medicines mentioned in *Epiphora* made of *Vitriol* and *Verdegreece.*

Somtimes the Scab is taken away with a Rag or rough Leaves til the blood cometh and then we uſe Driers afterwards.

The cure of an ulcer in the Eye.

If a true Ulcer follows excoriation, or be left in an *Ophthalmy* after an Impoſthume, then firſt cleanſe, and after dry, and make a Scar.

Uſe gentle Clenſers, if the Ulcer be not foul, and ſtronger, as Cauſticks if foul, or the Lips hard, ſuch as as we ſhewed in films of the eye and weakneſs of Sight.

The gentle are ſuch. Take *Goats or Womans milk an ounce, Sugar candy a dram and an half, Myrrh a ſcruple.*

Or: Take *Honey water diſtilled an ounce, Sugar candy half a dram, Lizards dung half a ſcruple.*

Water diſtilled from *Turpentine* is good.

A ſtrong Clenſer and Healer. Take *Turpentine half a dram, a yolk of an Egg*, beat them, and add *Plantan* and *Roſe water.*

If you need ſtronger, uſe thoſe mentioned in a *Fiſtula of the Eye.*

After all theſe uſe Driers mentioned in *Epiphora*, or the *Oyntments to the Eyes and Eyelids.*

A white drying Medicine. Take *Ceruſs waſhed in Plantans water a dram and an half, Starch a dram, white Coral and Harts horn burnt and waſhed, each half a dram; the mucilage of Comphrey half an ounce, with the juyce of the Grinding of the Stone Galactides, with Roſe water* 1. mix them.

A red drying Oyntment: Take *juyce of Hypocistis, Dragons blood, each half a dram; Aloes a scruple, Myrrh half a scruple, barke of Frankincense half a dram, infusion of Gum Traganth in Plantane water half an ounce, the juyce of Blood-stone, ground with water of Horstaile, as much as is fitting.*

A black drying Eye-water: Take *the soot of burnt Pitch as much as a Hazel-nut, and Oyl as much*, mix them *with the yolk of an Egg*. This *Dioscorides* approves against corroding of the corners of the Eyes.

Or: Take *soot of burnt Pitch and Turpentine as formerly and Acacia, each half a dram; the white of an Egg beaten half an ounce, with syrup of dryed Roses*: mix them.

Another Eyewater: Take *Sarcocol, Frankincense, each half a dram; Myrrh, Aloes, Lycium, each a scruple; Tutty prepared half a dram, Antimony a scruple*, mix them Powdered *with Honey of Roses.*

A stronger: Take *Tutty prepared a dram, Antimony a scruple, Brass, Lead, Coral, Hearts-horn*, all burnt and washt *with Horse-tail water, each half a dram, Sugar two scruples*, mix them, *with the white of a hard Egg.*

Rhasis his Eye water of Lead, good in suppuration after Inflammation and in an Ulcer: Take *burnt and washt Lead, Antimony, Pompholyx washt, burnt Brass, Gum Arabick, Traganth, each three drams and an half; Opium half a scruple and six grains*, Pouder them, and use them in Rain water.

Eleiser, or the Eye water of *Rhasis*, good when we fear the Pupil will come forth, after an Inflammation and Ulcer: Take *Antimony and Blood-stone, each five drams; Acacia a dram and an half, Aloes half a dram*, mix them *with juyce of Quinces.*

Rhasis his Eye-water, called *Polycrestum*, that makes flesh in Ulcers, and keeps the pupil from coming forth and cleanseth scars: Take *Tutty, Pompholyx, Ceruss washed, Antimony, Frankincense, each a dram; Myrrh half a dram, Sarcocol two scruples six grains, Cinnabar, Aloes, Opium, each half a dram.*

The Cure of an ulcer in the corner of the Eyes.

An Ulcer after an Impostume in an *Ægilops*, is to be cleansed and dryed, as we shewed in the Ulcers of the Eye, choosing the strongest means, because the water and filth still gathereth to the part.

This is done well by a Lixivium, to wash or squirt into it, though it come out at the Nose, any Lixivium or Lye made of Ashes or burnt bones, will do it, using stronger or weaker, as you may know by the sliminess of it.

Also use Urin used in the same manner.

A stronger Lixivium: Take *Lixivium a pint and half, Rose-vinegar half an ounce, Pomgranate flowers and Galls, each half an ounce; Rue half a handful*, boyl and use them.

Another: Take *Lixivium half a pint, Allum half a dram, white Vitriol a scruple*, these must be moderated, as you find occasion.

A drying cleansing Decoction: Take *roots of Snakweed, Tormentil, Moulin dryed, each half an ounce; Agrimony a handful; Rue, Chamomil, each half a handful; an old Nut kernel, Pomegranate flowers and Galls, each half an ounce*, boyl them in *red Wine*, add *a little red Vinegar.*

A cleansing Oyntment: Take *Aloes a dram, Myrrh half a dram, Honey a dram, Gall and Saffron, each half a scruple; with Turpentine*: make an Oyntment.

Another: Take *juyce of Plantane and Agrimony, each an ounce; juyce of Rue, red Vinegar and Honey, each half an ounce; Oyl of Roses an ounce*, boyl them thick, *and with a little Turpentine*, make an Oyntment.

An Oyntment to heal, a cleansed Ulcer: Take *Antimony, Lead, burnt and washt, Tutty, Litharge, each a dram; burnt Allum two scruples, Verdigreece half a scruple, Blood-stone a dram, Dragons blood, Aloes*, dissolved in *Vinegar, each half a dram; round Birthwort two scruples, burnt Ivory and Coral burnt, each a scruple; with Honey and Turpentine*: make an Oyntment.

Or thus: Take *filings of Iron a dram, and burnt Chalcitis half a dram, burnt Lead and Antimony, each two scruples; with Butter and white Wax*: make an Oyntment.

A good Plaster to Cure the Ulcer: Take *Bole a dram and an half, Dragons blood, Mummy, Acacia, Hypocistis, Frankincense, Mastick, each half a dram; Acron cups, round Birth-wort, Gall and Cypress nuts, each two scruples; with Ising-glass, infused in Vinegar*: make a Plaster: apply a little Plaster to the corner of the Eye.

The Cure of the weeping Fistula.

If there be a Fistula that weeps alwaies, then take of the Callus with that part of the bone that is foul, and then fill up the Cavity with flesh, with as little scar as may be.

Ægyptiacum takes away a Callus, put in often with a Tent. Or other Oyntments of Verdigreece, or a little qualified Aqua fortis, or sublimate water boyled, or sublimate it self put in, and the like, as hereafter.

I have used my Caustick, which causeth no pain and it hath caused an *Eschar*. But an actual Cautery doth it sooner, if the bone be foul. Which you may know by opening the flesh with your Lancet. It must thus be burnt, first defend the Eye with a Linnen cloth dipp'd in whites of Eggs, and Rose water, and with a silver spoon, and then conveigh a red hot Iron with a round head, through an Iron quil, to the part, once or twice, til the Eschar fals off, use Mucilages with yolks of Egs and Butter.

Then increase Flesh: As, Take *Birth-wort roots, Orris and Frankincense barke, each a dram and an half; Myrrh, Mastick, Sarcocol, Aloes, Lapis Calaminaris, each a dram, with Honey and a little Verdigreece*: make an Oyntment.

I have seen in this Disease, being old and above a years continuance, that a piece of the bone, with the stinking flesh hath fallen off, of it self, into the Nostrils and neither tears, nor matter, hath often come forth at the Eye. But through the Nose and the part hath been healed up.

If the Eye be hurt from a stroak or wound, you must presently use things to stop blood, dryers and healers. The blood of a Pidgeon, or Hen, or Turtle, put into the Eye stops bleeding.

The Cure of Wounds in the Eyes.

And this: grind Brim-stone with Milk, put it into the Eye.

Or: Take *the red juyce of Blood-stone ground with Milk an ounce, the white of an Egg beaten half an ounce, juyce of Hypericon a dram, Frankincense half a dram*, add *a little Opium*, if then pain'd.

Then: Take *the white of an Egge beaten, the Mucilage of Comfrey roots, each half an ounce, Ceruss and Tutty washed in Plantane water, each half a dram; Antimony a scruple, water of St. Johns-wort and Steel'd water, of each an ounce.*

Then Cure the Ulcer, as we shewed in Ulcers.

CHAP. V.

CHAP. V.

Of the Pain of the Ears.

The Kinds.

THe Kinds of inward pains in the Ears are from the diversity of the propriety, as there is any thing in them or not, we speak not here of outward pains.

Itching of the Ears. Somtimes there is only an itching in the Ear, such as the finger or an Ear picker can scarse allay.

A pricking, beating, shooting and burning in the Ears. Somtimes there is a pricking pain and beating, more or less, with burning, and pain on that side of the Head, and it is either increased or not, with things put into the Ear.

In these pains there is a Disease somtimes apparent, as redness to the whole Ear, or more inward to be seen by the light: or Exulceration. Often blood, matter, floweth out, of it self, or by pressing the lower part. We have seen water come forth in abundance, as in a Girle after a fal, first blood, then water with pain, and after blood and water, and then death followed, after a few daies sleep. Somtimes worms come forth. Somtimes pain is deep without these signs.

The Causes.

The place affected. The Membranes only are sensible, which are about the Cavities and the pain is from them, either from the Membrane most outward, before the drum, or from that within, behind the drum, being dilated by the Nerve; and then the pain is with noise. The Diseases that cause this pain in the Membranes are cold or hot distemper or Malignant, a stretching, or manifest hurt of the Membrane.

A hot distemper causeth itching in the Ears. A hot distemper causeth itching in the Ears, but an Inflamation causeth pain, that is pricking, beating or shooting with burning. This pain is as the blood that flowes thither is hotter, or more inflamed. And they have a little feaver with shivering and with Head-ach. And when the Inflammation turnes to an impostume the pain encreaseth, and when it breaks the pain ceaseth, and bloody matter comes first, then concocted or discoulered: this matter retained causeth itching and new pain, and corrupting causeth worms somtimes. We thought this matter had come from an Ulcer without the canal of the Eare, because the Ear being pressed near therto, it came forth. The cause of this hot distemper is either pains from outward injuries, that causeth the defluxion into the part: or fulness and heat of blood in the Veins, that flows upon the part, with a Feaver and Head-ach going afore.

A cold distemper causeth pain in the Ears. A cold distemper from cold Air outwardly or wind disturbs the Membranes in the outward Cavity of the Ear and causeth pain, or cold water in the Ear: It is somtimes in the inward Chamber of the Ear from the defluxion of a waterish humor, such as we see fall cold from the Nose, which distempers the inward Membranes.

A Malignant quality causeth pain of the Ears. An evil qualitie that causeth the pains in the Head and bony parts in the french Pox and other diseases, may hurt these Membranes in the Cavities of the Ears, and cause a pricking pain.

Provoking or rubbing causeth itching of the Ears. The itching in the outward part of the Ear or tickling comes often from irritation, or provokling, as from hot blood, boyling in the Vessels of these Membranes, or from matter, or cholerick filth in the Ear, or other things fallen into the Ears, which chiefly offend the outward Membrane.

A stretching by which these Membranes seem to be as it were pulled from the bones to which they are joyned, causeth a stretching pain in the Ears, this same thing is from wind, from which there is rather a strange noise, then a pain, as we shewed in the hurt of hearing, except it fil the inward Chamber of hearing so that pressing the Membranes it causeth a kind of pain. Or being bred under the Membranes of both Cavities internal and external (as wind, may bred in the whol body and is most constrained between the Membranes) it cause a twiching and tearing pain, by drawing the Membranes from the bones. I have known this distension in the Ears with much pain by consent of the Membranes through the whol body, come from straining much in going to the stool, and in pissing forth a stone from the neck of the Bladder, and in great and loud Vociferation and whooping, and also in difficult Child bearing, as in one who had no pain during her travil, but in her ears. And she was dul of hearing all the time of her lying in and long after.

Stretching in the Ears, causeth pain.

A wound or other hurt causeth pain in the Ears. A manifest hurt from outward injuries or things fallen in or thrust into the ears, which prick or cut the Membranes causeth pain. And if there were violence and blood comes forth, there is a manifest wound; And Inflammation come, the pain is increased, and the more, if an Impostume follow, which being broken, matter cometh forth.

The Cure.

The Cure is divers, in respect of the Disease, as it is a hot distemper Inflammation or Ulcer, or a cold distemper Malignant, or other hurt.

The Cure of itch in the Ears from a distemper. If the Ears only inwardly itch from a hot distemper it goes of it self away, especially, if the Air be cool, or by cold Medicines, which I shall declare; Or if hot blood remaining in the Vessels, cause the itching, it is cured by revelling that, and purging and cooling it. But if Inflammation cause pain, you must persently draw back the Flux of blood from the part, and stop it from returning, allay the heat, asswage the pain, and discuss what remains. Or if it come to an Impostume and being broken, leaves an Ulcer, you must proceed, as in that case. Thus,

The Cure of Inflammation in the Ears.

We revel and derive the Flux of blood, by letting blood, by Scarifying and Cupping and by Horseloeches, and by Friction, as in *Opthalmy*.

And

And we use the same Clysters and Purges if the body be bound as in *Ophthalmy*.

We give to drink things that cool and thicken to stop the course of the blood when hot especially, and things that by propriety asswage pain in the Ears, as they say the flesh of Dormice made up with Honey doth.

We use the medicines mentioned in *Ophthalmy* to the jugular veins and temples to hinder the Flux, and if there be Head-ach, we use Vinegar of Roses and other things to oppose both pains.

Into the Ears we drop many Liquors, two or three drops, and if these fill the Ear, after they wet the sides thereof, that they may not longer hinder the Hearing, especially if strong, least they hurt the Drum, you must turn the Head that they may fall out of the Ear again. Or you must apply outwardly hot Cataplasms upon the Ear, so that they may fill the Cavity. or a Fomentation with a Spunge. or a hot Fume. and we use Allayers of pain when it riseth, and things that repell or drive back at the first if there be a flux and Coolers, and in the progress and declination we use Digesters, and if it imposthumate, we use Digesters thus.

To asswage pain, *new warm Milk or the white of an Egg beaten to Liquor, Ducks or Hens Grease, Oyl of sweet Almonds and yolks of Eges, or Oyl in which Earth-worms or Snails have been boyled, which have been first taken out of their shels with the slime, or in which Hog-lice or Millipides have been boyled, or Oyl of Poppy, or Henbane seed, or the juyce of Poppy or Henbane.*

Or drop these Compositions into the Ears. Take *Womens Milk two ounces, the white of a an Egg beaten half an ounce; with Goose Grease two drams:* mix them.

Another. Take *mucilage of Fleabane and Fænugreek seeds, and whites of Eggs beaten, each half an ounce; Goose grease two drams*: mix them with *Oyl of Almonds* and *Milk*; add *three* or *four grains of Opium* to make it stronger.

A third. Take *Oyl of sweet Almonds two ounces, juyce of Mallows half an ounce, Myrrh half a dram, Saffron half a scruple, Opium three or four grains.*

A fourth. Take *Oyl of white Henbane seed a dram, as much Saffron and Castor as a Pease*: mix them.

An anodyne Emplaster. Take *crums of Bread a pound*, boyl them in *Milk*, add *flour of Line seed and Fænugreek each an ounce; Oyl of Chamemel an ounce and an half, two yolks of Eggs*: mix them, and if you add *Opium* it wil be better.

Or: Take *Marshmallow roots an ounce, Mallows, Nightshade, St. Johns wort, each a handful; flowers Dill, Chamemel, Roses, each a pugil; Line seed half an ounce, Mallows, Marshmallows, and Poppy seeds, each two drams*: make a *Decoction* in *Water* or *Milk* for a *Fomentation* or *Fume*: If you add *Leaves of Poppy*, or *Henbane*, or *Mandrake roots*, or *Poppy heads* when there is pain it will be better.

Or: Take *the faces of this Decoction*, and beat them with *Hogs grease, Calves marrow, mucilage of Fleabane and Fænugreek, each an ounce; Oyl of Chamemel and Violets, each an ounce; fresh Butter an ounce and an half, Saffron half a dram*: make a *Cataplasm*.

To drive back and to ease pain. Take *Oyl of Roses, and Violets, and sweet Almonds, each equal parts*, add *Earthworms, Sows, Snails*, and with a little *white Wine*, boyl and strain them.

Or: Take *Oyl of Roses two ounces, Vinegar an ounce, Saffron half a scruple, Opium three or four grains*, boyl them til the *Vinegar* is consumed, or in stead of *Opium* and *Saffron*, add *Philonium Romanum two drams*, boyl them in *Oyl* and *Vinegar*.

To cool and drive back, put in *Oyl of Roses or Violets, juyce of Plantane, Nightshade, Willow, Venus navel*, and the like.

Or this: Take *Oyl of Roses an ounce and an half, juyce of Pomegranates and Plantane, each half an ounce; white Wine Vinegar two drams*: boyl them till the Juyces are consumed.

Or this Fomentation. Take *Plantane, Willow, Violets, Lettice, each an handful; red Roses a pugil, Pomegranate flowers half a pugil, Pomegranate Pils half an ounce*, boyl them in *red Wine*, and with a little *Vinegar* foment the *Ear*.

Or: Take *the residence of this Decoction*: add *meal of Lentiles a pugil, oyl of Roses and Myrtles, each an ounce and an half; one raw Egg*, make a Cataplasm for to be laid upon the Ear.

To discuss the Inflammation, mix hot things, and in the decrease use them alone, as *Oyl of Chamemel, Melilot, Dill, Lillies*, dropt into the Ears, and other hot things inwardly and outwardly, such as shal be mentioned when it proceeds from a cold cause.

The Cure of Imposthumes in the Ears after Inflammation.

If the Inflammation tends to maturation which is known by the beating and not ceasing of pain use things to digest as Basilicon with Line seed Oyl into the Ears.

Outwardly apply this Cataplasm which asswageth pain. Take *a great Onyon and white Lilly roots*, roast them in the *Embers*, beat them, add *Lineseed meal an ounce, Butter an ounce and an half, oyl of Chamemel and Line seed each half an ounce, Saffron half a dram*: make a *Cataplasm*.

The *juyce of an Onyon* openeth a ripe Impostume with *Leaven* dissolved in it.

The Cure of an Ulcer of the Ear after an Impostume.

If an Ulcer follow the Impostume opened first clense, then add Driers, and heal it with the same.

Use the same Clensers as were prescribed for Hearing hindered. And these,

Sugar, or *Sugar candy*, or *Honey* dissolved in *Whey* or *Barley water*.

These are stronger, *Honey of Squils, juyce of Smallage, Fennel, Beets, Onyons, Leeks, Horehound, Wormwood, Centory*, alone, or with *Honey*.

The Decoction of *Lupines* and *Agarick* do the same.

Wine clenseth wel, and also *Lixivium* or *Lie*.

Turpentine with *Honey* and *Wine* doth the same.

Ægyptiacum is the strongest, for a sordid Ulcer, tempered with *Honey* if you please.

To heal and dry. Take *Plantane, Shepheards poench, and Shepheards red, Scabious, Birthwort, Solomons seal, Fleabane, and the thickned juyces of green Grapes, Oyl of Olive and Hypocistis* alone or with *Wine Vinegar* and *Honey*.

Or the *Decoction of Birthwort, Galls, Pomegranate peels*, and other Driers in *Wine* or *steeled Water*.

Rust of Iron in astringent Wine and a little *Vinegar* is excellent or the *Decoction of Litharge*.

This is best. Take *fine pouder of Steel half an ounce, Vitriol a dram*: boyl them in *Wine* and *Vinegar*, or *Vinegar* alone if you wil have it stronger, and strain it.

A good Liniment. Take *Cinnabar and Litharge, of each equal parts, and with Honey or syrup of dried Roses*: make a *Liniment*, drop a little into the *Ear*, or put it upon a *Tent*.

Or this to breed flesh. Take *Ceruss, Tutty prepared, each*

each a dram; *roots of Birthwort, Myrrh, Sarcocol, Aloes each half a dram*; *Orris a ſcruple*, make a fine *Pouder*: mix them with *Honey* or *juyce of green Grapes*.

It is ſtronger with Verdegreece and filings of Iron quenched and ground with Vinegar, eſpecially when a Scar is to be raiſed.

You may uſe divers Waters for the Eyes here, and the ſtrongeſt, becauſe the Ear is leſs offended therewith than the Eye.

To Cure an Ulcer in the Ear, a Fume is excellent, becauſe it gets through and drieth, as of Pitch, Turpentine, Frankincenſe, and other Gums burned, which are Driers. Or the Pouders mentioned white a little Cinnabar which is very drying.

The Cure of worms in the Ears.

If Worms breed from the filth of the Ear and provoke, you muſt draw them out or kill them, as was ſhewed in the Deſect of Hearing from things fallen in.

Juyce of Wormwood is the beſt to kil them, and of Centory, Arſmart, and Peach Leaves, and of wild Cowcumber.

Or a Decoction of Lupins, Coloquintida, white Hellebore in Wine vinegar.

Or Beaſts Galls.

Or bitter Oyls, as of Peach kernels, and bittet Almonds.

Or thus. Take *Coloquintida half a ſcruple, white Hellebore a ſcruple, Aloes half a dram*; with the *juyce of Peach leaves* make a *Liniment*.

In the Worms of the Ear for killing and drawing forth, as in the Worms of the Noſe and Brain, the Oyntment of Capons Greaſe, and Oyl of Hazel, with a little Mercury precipitate or ſweet is good, if it be put into the Ears with Cotton. And the Decoction of Hemp diſtilled.

The Cure of pain in in the Ear from a cold diſtemper and diſtenſion.

If the pain come from a ſimple cold diſtemper, or with matter from Wind, then if the Humor or Wind be preſent, we uſe Cupping or Friction to revell it, and Clyſters and Purges which do the ſame, and evacuate the humor. And we derive the matter by the Mouth and Noſe, as is ſhewed in the *Hurt of Hearing*, from theſe cauſes, and we diſcuſs with Baths and other Sudoroficks. If it be only a diſtemper, we alter it with heat and hot Diet, as with the fleſh of Dormice as we ſhewed, which hath a propriety.

We uſe the ſame things inwardly and outwardly to the Ears, or theſe.

Take *Oyl of biter Almonds, of Peach kernels, Chamomil, Melilot, Dill*, alone or together.

When the pain is intollerable. Take *Oyl of Henbane ſeeds half a dram, Caſtor half a ſcruple, Saffron ſix grains*.

Or: Take *a hollow Onyon* and put into it *Caſtor, Euphorbium, each half a ſcruple*; *Opium ſix grains*, fil it with *Oyl of bitter Almonds* roaſted in the *Embers*: ſtrain and uſe it.

Or: Take *a piece of a Snakes skin*, boyl it in *Oyl of Worms*, add *Sows* or *woodlice*, and ſtrain it, you may add a little *Oyl of Scorpions*.

Or: Take *juyce of Pellitory, Horehound, each an ounce*; *Oyl of Bayes an ounce and an half, Ox gall a ſcruple, Hens greaſe a little*: boyl them til the *Juyces* are ſpent, anoynt and drop into the Ear.

A little *Sponge* dipt iu *Vinegar* with a little *Salt* is good to be applied cloſe to the *Ears*.

This Decoction or the Fume thereof is good for the Ear. Take *Organ, Pennyroyal, Rue, Bases, each a handful*; *Wormwood half a handful, Chamomel, Melilot, and Dill flowers, each a pugil*; *Bay, Elder, or Ivy berries, each an ounce*; *Fænugreek ſeeds two drams, Carua ſeeds a dram*: boyl them in *Wine* and *Water*.

Make Bags of theſe Driers.

Or thus: Take *Panicum a pugil, Organ, Marjoram, each a handful*; *Chamomel flowers a pugil, Saffron half a dram*: pouder them for a *Bag*.

Or: Take *roaſted Onyons and Leeks, each three ounces*; beat them, add *meal of Line ſeed and Fænugreek, each half an ounce*; *Peach kernels an ounce*, boyl in *Milk* and ſtamp them, add *Gooſe greaſe an ounce, Oyl of Dill*, or *Earth-worms*, or *Butter two ounces, Saffron a ſcruple*.

They ſay it is good againſt pain to rub the Ear with Garlick, becauſe it draweth the matter outwards: but the roots of Squils, Sowbread, Cuckow-pints, or Dragons, are ſtronger.

Some apply green Tobacco leaves to the Ears, and then dry them, and apply them again.

The Cure of pain in the Ear from malignity.

If an evil malignant quality as in a long Head-ach and French Pox produce pricking in the Ears with noiſe; after long and ſtrong evacuations by Sweat eſpecially, it ceaſeth with the Diſeaſe, and if any remain it is taken away by the Topicks mentioned in a cold cauſe and moiſt, in the Cure.

The Cure of pain of the Ears and Itching from Irritation or Provocation.

Provocations, Itchings, and other pains of the Ears, if they come from filth in them, or that falls into them, we ſhewed you how they may be removed in the hinderence of Hearing.

The Cure of a pain of the Ear by a wound.

The violent hurts which cauſe a Wound, are cured as other punctures and wounds. Firſt if Inflammation be feared, let blood, and repell it with things put into the Ears. Then drop in things that aſſwage pain, and ſtop the Flux, after uſe Driers and Healers, as we ſhewed in Ulcers.

CHAP. VI.

Of Diſeaſes or Griefs of the Noſtrils.

The Kinds.

THe Kinds of Pains or Diſeaſes in the Noſtrils are divers.

Itching or tickling in the Noſe.

There is an oſten Itching, or Tickling, Sneeſing follows it ſomtimes, and the Noſe droppeth.

Burning in the Noſe.

Somtimes it is Burning, and the Noſtrils are hot, and red, and inflamed, with a tumor within, or Inflammation that obſtructeth the paſſage.

An ulcerous pain in the Noſe.

Somtimes there is a pain like an Ulcer and blood is blown out, or hard flegm: Or Snot or ſtinking matter, and there is a ſtink in the Noſe which the people preſently perceive more than the Patient in that called *Ozæna*. And there is a deformity of the Noſe therewith, which ſpoileth the whol Face. The Voyce is hoarſe, and as coming from a hollow place, the Palate is eaten through with a great hole, and the breath-

ing is hindered, as we have ſeen alwaies in the Elephantiaſis, often in the French Pox.

The Cauſes.

The Grief of the Noſtrils, proceeds from a Diſeaſe, which is either Irritation or Provocation, or a hot diſtemper or ſolution of continuity.

The Irritation of the Noſtrils, cauſeth itching and tickling.

The Noſtrils being very ſenſible are eaſily provoked, hence comes tickling or itching, and ſomtimes ſneeſing from the ſame Cauſes that we ſhewed, ſneezing proceed, as externally from light and ſplender, ſtrong ſcents, things put into the Noſe that are ſharp, or internally from thin blood in the Veſſels, or from wateriſh and ſharp blood, with tears that come from the Head and twitch the Noſtrils. And Choler which is uſually purged at the Ears, may be brought to the Noſe and cauſe the ſame.

A hot diſtemper and Inflammation of the Noſtrils, is the cauſe of burning pain.

A great heat may cauſe burning in the Noſe, to which is joyned ſomtimes a true Inflamation with tumor and obſtruction, as may happen from an outward hurt or internal, when the cauſe is very pricking, from whence the Noſtrils are uſually afflicted, as in *Coryza*, where the Noſe is outwardly red and inflamed, as well as inwardly.

Excoriation, wound or ulcer, is the cauſe of ulcerous pain in the Noſe.

A Solution of continuity, within or Excoriation, or Wound, or Ulcer, reacheth ſomtimes outwardly. Theſe may be from picking, as with the Nayles, or burning Errhines or Noſe Medicines, ſuch as we uſe in Cure of *Polypus*. Somtimes from a ſharp defluxion that hath long paſſed that way, the Noſe is ulcerated inwardly and outwardly, with the help of often blowing it.

There are in the ſpungy bones at the bottom of the Noſe foul, ſtubborne and long Ulcers, ſomtimes ſuch as corrode and creep on, ſomtimes they pirce the thick tunicle of the pallate and eat of the bridg of the Noſe which cauſeth it to fal. Often alſo the bones which are near the upper Jaw are conſumed and leave a great ſpace in the palate through which a ſtink hath paſſed that anoyed the whol room where we were. And it is manifeſt that worms have been bred of this filth and come forth.

Worms in the Noſe.

Theſe may be from the cauſes mentioned, as if the Noſe be deeply hurt, or the Ulcer neglected, or the remedies come not to the part by reaſon of its moyſture and cannot have operation. Theſe called *Ozæna* come chiefly from the Flux of burning or malignant humors ſent by nature to the part and there are perverſe and cancerous Ulcers and tumors. But becauſe this is not only in this part, but a malignant humor and quality in other places, eſpecially the Membranes, as in the *Elephantiaſis* and French Pox, then they of the Noſe grow together with other putrid and Malignant Ulcers which eate away the Noſe and the bones, and produce other accidents.

The Cure.

The Cure of itching of the Noſe from provocation.

If the itch of the Noſe come from provocation, remove the cauſe whether internal or external, and if it ceaſe not, qualifie it. As we ſhewed in neeſing which often followeth, and ſhall be ſhewed in defluxions and in *Coryza*.

The Cure of heat and Inflammation of the Noſe.

If the Noſe be hot or inflamed then there is redneſs heat and tumor external, to be cured as we ſhewed in the greiſes that come from diſeaſes in the ſuperficies of the body.

The Cure of ulcers of the Noſe.

Ulcers of the Noſe, internal and ſimple, without matter or ſtink, are cured with ſtrong dryers, becauſe the part is very moiſt. But matter muſt be firſt cleanſed, as it abounds. Or is ſtinking, or as the fleſh grows rank, which is hard to be cured. Somtimes they are incurable and leave deformity. Before theſe topicks purge Excrements, if they produce theſe Ulcers or nouriſh them. If they come from evil and Malignant humors, you muſt uſe divers Evacuations of the whol body, as in Elephantiaſis, eſpecially by ſweat in the French Pox, as ſhall be declared.

Theſe are put into the Noſe, ſnuffings or oyntments with Cotton, or Suppoſitories, or Fumes, or Pouders blown up. And if you will not have them fall into the mouth, through the Noſtrils, hold cold water in the mouth, when you take them.

Other gentle clenſers are made of Whey with Honey, or red Sugar, or Wine and Honey, or Oxymel.

Lixivium and Urin cleanſe more, eſpecially it you add a little Allum, or if you keep them in a braſs baſin to gather Ruſt or Verdigreeſe.

The Decoction of Gujacum in a Lixivium, with Honey will clenſe more, but aſtringent Wine will dry more, eſpecially in the French Pox.

The juyce of Ivy clenſeth, filleth in the Noſe, and is approved by *Dioſcorides*.

A clenſing and drying Errhine: Take *juyce of Pomegranates and Plantane, each two ounces*; *Honey and Wine, each an ounce*; *with Allum and Vitriol*: mix them.

Another Oyntment: Take *juyce of Ivy and Plantane, each two ounces*; *Pomegranate, wine Vinegar and Honey of Roſes, each an ounce*; *Oyl of Roſes and Myrtles, of each an ounce and an half*; boyl them, add *green Wax*, made with *Verdugreeſe*.

Ægyptiacum, if uſed in foul Ulcers alone, when you muſt clenſe much and when the fleſh is foul.

You may with warineſs apply *Aqua Fortis*, or Sublimate, or Spirit of Vitriol, with a quil to the Ulcer. Or water of Lime quenched in it.

Make a dry and heating Errhine: Thus, Take *Plantane, Horſe-tail, Agrimony, Brambles, Solomans ſeal or Rupture wort, of each a handful*; *Pomegranate peels an ounce, Galls, Comfrey roots, each half an ounce*: boyl them in *Water and red Wine, and a little Vinegar and Honey*.

Or thus, when the Griſtle of the Noſe begins to be corroded and the Noſe bend: Take *juyce of Plantane, Agrimony, Mouſe-ear, Burnet, Roſes and Smallage, each an ounce*; *Vinegar and Honey, of each an ounce*; *Allum two drams, Frankincenſe and Myrrh, each a dram*; *Chalcitis a ſcruple*: mix them, for an Errhine to be ſnuft up.

An Oyntment for the ſame: Take *Litharge and Ceruſs waſht in Plantane water, of each half an ounce*; *Tutty prepared and Lead burnt and waſht, each two drams*; *Myrrh and barke of Frankincenſe, each a dram*; *round Birth-wort half a dram, with juyce of Plantane and Oyl of Roſes*, mix them.

Or thus: Take *roots of round Birth-wort, Pomegranate peels or flowers, of each two drams*; *barke of Frankincenſe, Myrrh,*

Myrrh, Aloes, Labdanum, Dragons blood, Gum Traganth a little parcht, of each a dram; Lime often flaked two drams, Allum and Chalcitis, each half a dram; Oyl half an ounce, Mucilage of Ising-glass, infused in Plantane water an ounce with Oyl of Roses, and red Wax, and Cinnabar prepared, make a Liniment, or thick Oyntment, or a Mass to put into the Nose.

A Pouder: Take *Tutty prepared, Coral burnt and washed, of each a dram; barke of Frankincense, roots of Birthwort, each half a dram:* make a Pouder, and snuff.

Many Medicines mentioned in the Ulcers of Eyes and Ears are good in the Nose.

Smoak which comes best at an Ulcer, when profound or deep, doth well to dry and to burn, if they be vehement and Malignant hold the breath while they are applied, and remove them, till breath be fetcht.

Thus they are made: Take *Frankincense, Mastick, Labdanum, each two drams: Storax, Benzoin, Gum of Juniper, each a dram and an half; Sanders a dram, wood Aloes half a dram:* make a pouder, sprinkle it upon live coals for to smoak.

In the worst Ulcers: Take *the pouder aforesaid,* add *Myrrh a dram, Marcasites, red Orpiment, Cinnabar* (in the French pox) *each half a dram;* make pouder for a smoak or fume, make Balls of them with *Turpentine or Gum.*

The smoake of Cinnabar with which the whol body is fumed in the French pox, coming to the Nose, doth not only Cure this disease, but other diseases of the Nose of the like sort, if the Head be a little held therein.

There is a Candle made of red Wax and Cinnaber, which if lighted and put out will smoake to the Nose.

Or thus, *Wax as much as a Nut,* add some of the first or second mentioned pouder, make it with your hands into a Candle with a wick; use it as the former.

Another that maketh much black smoake: Take *Pitch and Rosin, each equal parts, with a little Brim-stone,* dissolve them at the fire, and with a wick make a Candle, let it be lighted and the smoake pass through a funnel to the Nose, and be presently removed.

If there be crusts in the Nose that stick fast to the Ulcer, take them of with Butter or Mucilage.

If there be proud Flesh, Cure it as I shewed in *Polypus.*

The Cure of wounds in the Nostrils.

The wounds in the Nostrils are cured with the same means, as they in the Ears, with things put in that stop blood, then dry and heal, if they ulcerate, Cure them as others Ulcers.

CHAP. VII.

Of Griefs or Pain of the Mouth.

The Kinds,

THe Griefs of the fleshy parts of the Mouth, as the Tongue, Gums, Cheeks and Palate, in any or all of them: come sometimes to the Jaws, of which we shall speak hereafter: they are distinguished, as they have sense of roughness, or heat, or burning, or pricking, or are ulcerated.

Roughness of Mouth and Tongue.

There is molestation in the mouth and tongue, only with sense of roughness, because the taste and Speech are offended, we speak thereof in the hurt of Speech and Taste.

Pricking and burning of the Tongue, when no Disease appeareth.

I have seen some that have had burning and pricking in the sides and tip of the Tongue many years without any appearent disease. Sometimes in this part only, sometimes in the tips and other parts of the body, as we shall shew in pains of the habit of the body.

A heat alone or with Tumor and burning and sometimes with clefts and pustles of the Tongue and parts of the Mouth.

Sometimes the tongue is troubled only with heat, sometimes with burning also and a manifest disease. And then it is not exactly red as other parts that are white, but yellow and swels and is inflamed, and is sometimes also very dry and rough and is cleft, and hath pimples sometimes, which so molest the Patient that he cannot speak without pain and stammering, and the part near and the jaws are afflicted therewith, and there is a quinsie and the patient is in danger of suffocation. These are most in feavers; but not alone as I shewed in Feavers continual and malignant, called in High-dutch *Brune.* Also this Inflammation of the mouth, may come from the use of quick-silver in the French Pox.

The Gums often swel and are hot, at the roots of the Teeth, with a tumor appearing outward, as in the Tooth-ach, and the pain is great, especially when the inflammation Impostumateth, as shall be shewed in pains of the Teeth.

Also the Cheeks and Palate by consent of the parts, and of themselves do swel and are inflamed.

Frog under the Tongue.

There is sometimes such a pain with swelling and Inflamation in the loose flesh under the tongue, in the disease called the *Frog,* which extendeth also to the parts adjoyning, and being suppurated it turns to an Impostum. And I saw a long stone which came from thence after great pain. Concerning the tumor, without pain I shall speak elsewhere.

The stone under the Tongue.

A pain in the Mouth and Tongue with an ulcer, excoriation or clifts.

There is also in divers parts of the mouth a sharp pain, with burning or without: with Pustles in the tongue or Palate or cheeks or Gums, often in Infants by means of the smal Pox.

Sometimes it is with Excoriation after the Pustles are broken.

And with clefts in the tongue, long and cross, there is great pain, and that with dryness and Inflammation of the tongue. And this pain is increased by hot or sharp meats.

There is also pain with Ulceration, after Excoriation, or Rawness, or Pustles broken, or after an Inflammation impostumated, especially under the tongue, or at the root of the Gums in the Tooth-ach.

Aphtha or *Thrush* called *Alcola by the Arabians.*

Little Ulcers are called *Aphthæ* or *Thrush,* they are in the Cheeks, Sides of the tongue and root thereof, Gums or Palate, in one, two, or more places. These are in Children usually, and in the French Pox; they are at the first smal, as Lentiles round and white in the middle, and red about; inflamed and painful, they spread presently, if you prevent not, and infect the parts adjoyning.

From

A Cancer in the Gums.

From these neglected cometh a malignant Ulcer in Children especially, or from other causes, it is in the Gums with little or no pain, *Rhasis* cals it the Cancer of the Gums. It is first white and mattery, then yellow, after black, it creeps on, and is hollow, and eats up the Gums where it is, and the Jaw-bone, and turns to a *Sphacelus*, And I have seen a piece of a rotten Jaw with the Teeth taken out which deformed the Face. And in two Children of a Merchant my Country-man, that bred teeth, I saw an Ulcer that eat up the upper teeth before, and another after the drawing of the tooth, that eat up the lower Jaw-bone, tongue, and palate, and at length after great torment caused their Death.

The Scurvy or Scrobute.

The Tumor and Ulcer of the Gums in the usual Disease, in Northern Sea towns called the Scurvy may be referred to this: In which the Gums swell and sweat blood, are rotten and so consumed that the roots of the teeth are bare. We shal only speak here of this Scurvy as it is in the Mouth; but in Diseases that foul the body, we shal speak fully of it as it infects the Feet with Spots, and Swellings, and Ulcers.

Somtimes there is a pain with a Wound made by a Prick, a Cut, or a Bite with Inflammation also. If this pierce the Cheek, it is in the number of outward Wounds.

The Causes.

The Disease which causeth these pains in the mouth is either in the Nerve, and appears not, or in the sensible parts of the Mouth mentioned. And it is either a hot Distemper alone, or with Inflammation or Solution of Continuity.

A Disease in the Nerves is the cause of pricking & burning of the Tongue without an apparent Disease.

There is a burning often of the tongue when no hurt appears from the Nerve afflicted, it is long and tedious. How this is caused we shal shew in Diseases of the habit of the body as we did in Astonishment and Palsie.

A hot Distemper causeth heat only, but an Inflammation causeth Swelling, Burning, Clefts, & Pustles in the Toung and other parts of the Mouth.

A hot Distemper alone causeth only heat in the Tongue, if it be with Inflammation, it causeth heat and burning with swelling. And thence come Pustles, and Excoriation or Rawness, if it come from outward things that burn the Tongue. But these come commonly from an inward cause, as a hot Vapor in hot Diseases and Burning malignant Fevers, which flies up and infecteth, and if the inflammation of the Tongue cause a flux of blood to the jaws with heat and pain, there is a Squinsie. The same may be from a bloody humor pure or impure that comes to these parts, and the Tongue and Gums may be inflamed chiefly. This may happen in divers Diseases, and in the French Pox.

If it flow to the loose flesh under the tongue it raiseth a tumor there with Inflammation, and that suppuarted turns to an Imposthume. This Flux to that part is caused by a Stone bred there from a wateriſh humor which caused great pain, often from pain of the Teeth, as shal be there mentioned, there is a Defluxion upon the Gums causing an Inflammation and Swelling.

A Solution of Continuity is the cause of ulcerous pain with excoriation, clefts, and ulcer in the Mouth & Tongue.

A Solution of continuity is the cause of an Ulcerous Pain, with Excoriation, or Cesis, and ulcer in the Mouth and Tongue.

This comes from things put into the Mouth that wound it, but more usually from a mans biting himself by the Tongue or Cheeks.

Burning things actually or potentially raise up the Skin, and cause bladders and excoriation after they are broken. In a tender Mouth, as of an Infant, sharp things may cause it, they say the *Aphtha* or Thrush is caused by sharp milk or Bread gnawn by Mice: If sharp things are also piercing they do it more, whereof I have observed in my self and others that if young Children eat green Nuts and Grapes together, their Tongues wil be cleft and pained.

Also where the Tongue is too dry from Causes mentioned in the hurt of Tasting, it is cleft.

These Pustles or Thrush and Ulcers, somtimes malignant. may come from hot cholerick melancholick sharp and salt Blood abounding, as in other parts of the body in these moist and tender parts.

And if such matter be in the spittle it may come from thence, as we have observed by the force of Quick-silver the Spittle hath been so infected in fluxing for the Pox that Inflammation and Ulcers have followed.

Also these Ulcers come from a Disease that went afore, as from an Imposthume after Inflammation. A Wound or simple rawness by reason of the moistness of the part is easily turn'd into an Ulcer, and the Thrush neglected. In an Elephantiasis or Leprosie and in the French Pox though they use no Quick-silver, and in the Scurvy, by reason of their venemous quality (as shal be shewed) there are Ulcers in the Mouth and Jaws.

The Cure.

The Cure of heat & Inflammation of the Tongue, Jaws, Cheeks, and Palate.

If Inflammation and preternatural heat of the parts of the mouth come from other Diseases, as Fevers, they must be first cured, as we shewed in Fevers, by letting blood for the Fevers, and Sweating, and by cooling the Heart, Liver, and Reins, restraining the corruption, and preserving the strength. But chiefly for the Tongue when much afflicted, to prevent a Squinsie and Death by the Inflammation going to the Jaws, open the Vein under the Tongue, although you have let blood before for the Fever and use diversions, by Cupping, Scarifying, Rubbing often, and things that heat and keep down foul vapors, and quench the great heat, not only for the Fever, but for the tongues sake: Examples of which we shewed in Fevers. In other Causes, use diversions, as in Fevers by bleeding and the like, as when the Gums are inflamed in the Tooth-ach.

Lest the mouth be inflamed by the use of quicksilver, before you apply it, wash the mouth often with Milk, fat Broath, Butter, or Oyl of sweet Almonds, and anoynt the Tongue therewith.

If it be a simple heat, wash the mouth with cold things, and moisten it, if it be dry, and if you fear Inflammation Astringe, and Repell, adding Clensers, by reason of the slime in the Mouth, and somtimes Resisters of Venom, and then use Digesters and Ripeners if it tend to an Imposthume.

We shewed in the hurt of Tasting what wil allay the heat and driness of the tongue.

When

When in the beginning of an Inflammation, we will repel and cool, together use these following.

Spring-water, and Rain water, astringe a little; and Wine Vinegar or Rose Vinegar added to sharpen it.

Also waters of Violets, Water-lillies, Night-shade, Purslane, Lettice, and these Astringents, Rose water, Plantane, Privet, Honey-suckle, and Myrtle water; chiefly water of Self-heal, used with Vinegar or other waters, for it cooleth not much of it self.

Thus: Take *water of Prunella or Self-heal four ounces, Rose, Plantane, Straw-berry and Purslane water, of each two ounces; Rose Vinegar and Honey of Rose, each an ounce; with a little Allum, or a drop or two of Spirit of Vitriol*, and then it will bind more.

Also sharp Juyces, as of Mul-berries, Bay-berries, Grapes, Cherries, Oranges, Limons, Citrons and Sorrel with Vinegar or alone, and the juyce of Lettice is counted best, these may be chewed or the juyce taken often.

Or you may boyl the Fruits, and wash the Mouth with the Decoction.

Or give the Juyces with Honey or alone.

Or the syrups made of them, chiefly that of Mulberries, may be mixed with Mouth water, or licked. In the French Pox, syrup of Violets, with the Decoction of Barley and Roses, cureth the Inflammation.

The vulgar High-dutch use the distill'd water of that Liquor, in which they pickle Cabbages, called *Sumpistbren*, or the liquor it self, if it be shaken together. To which you may add other juyces.

A cooling and repelling Decoction: Take *Violet leaves, Lettice, Plantane, Prunella or Self-heal, Willow, Sorrel, Vine, Straw-berry, each a handful; red Roses, Antirrhinum the great, Mallows, Barley, each a pugil; Gourd seeds two drams, Bar-berries a dram, soure Berries ten pair, soure Prunes six*, boyl them in *Water* and *sharp Wine*, add *a little Sugar* and *Honey of Roses*, use it so, or with Juyces, or Syrups.

Another more astringent: Take *Mouse-ear, Privet, Self-heal, Plantane, Brambles, Myrtles, each a handful; red Roses, Water-lilly, Barley, Vetches, each a pugil; Prunes or Cherries, Cornil berries or Cervises or Quinces some few, Bar-berries dryed an ounce*, boyl all in *red Wine*, add *Honey three ounces, syrup of Pomegranats two ounces*, wash the Mouth therewith.

In the increase of the Inflammation, add Digesters, thus: Take *Liquorish an ounce, Self-heal two handfuls, Plantane a handful, Hyssop half a handful, Mallow flowers, red Roses, each a pugil; Sage and Rosemary flowers, of each half a pugil; Beans and Lentiles, of each an ounce; Fenugreek and Linseed, each half an ounce; Acron cups six drams, Figs ten, Raysons not stoned twenty pair*, boyl all in *Water*, add *a little Wine and two ounces of Honey, syrup of dryed Roses an ounce, syrup of Mul-berries half an ounce.*

Or thus: Take *Self-heal two handfuls, Ground-sil, Cross-wort, Honey-suckles, Plantane, Hyssop, Sage, Maiden-hair, each a handful; red Roses a pugil, Myrrh two drams, a little Saffron, and two ounces of Honey*: boyl them in *Water*, add *a little Allum.*

Or thus: Take *Water of Self-heal six ounces, Plantane, Rose, Sage and Hyssop water, each two ounces; Honey of Roses, and a little Allum.*

I have done much in these Inflammations, with deep Ulcers, with Salt-peter prepared, called *Lapis prunellæ*, dissolved in Sage water, washing the Mouth warm therewith.

In Inflammations ready to ulcerate, from the use of quick-silver, some anoynt with Treacle, Aqua vitæ and Vinegar, or distil a water of them, and add Bole or other dryers, by this they believe the Poyson of the quick-silver, is taken away, and they also wash with a Decoction of Lignum vitæ.

When Inflammations tend to Maturation: Take *Marsh-mallow roots an ounce and an half, Figs twelve, Dates six, Tamarinds and Cassia with the seeds ten, Fenugreek and Lineseed, each half an ounce; Mallows and Chamomil flowers, each a pugil*; boyl them in *Goats Milk*, dissolve *the white of an Egg and a little Honey and Saffron.*

If the Inflammation be not only in the Tongue, but in other parts, you may anoynt under the Chin, at first with repelling Oyls, as of Roses, after with discussers, as Oyl of Chamomil and Lillies.

If the Inflammation under the Tongue tend to suppuration, make Cataplasmes of Marsh-mallow roots, Linseed, and other meats with Saffron, these asswage pain, and ripen, or boyl them in Milk and wash the Mouth. We shall shew the forms of these and such as open Impostums, in the treatise of Inflammations of the Jaws. If a quinsie be joyned with an Inflammation of the Tongue, or follow it, there are Medicines.

The Cure of Pustles, Rawness, clefts and Ulcers of the Mouth and Tongue.

In solutions of continuity, Pustles, Rawness, Clefts and Ulcers, if they come from an internal cause that must first be evacuated. If they come from other causes, yet if the body be foul or Plethorick, the Cure will be sooner done after purging. If the cause be malignant that must be first taken away, as in the French Pox, Leprosie and Scorbute. If that cannot be taken away, the Ulcers that come from thence can never be cured, these first done, apply Topicks for Pustles, Fissures, Rawness and Ulcers.

In Pustles, if there be an Inflammation, the Medicines there, are proper, if they are without Inflammation, they break of themselves and leave an Ulcer, which must be cured, as the Thrush. If they continue long and are troublesome, apply Leaven to ripen, or Starch with Urine, and a little Wine.

If there be an Inflammation, with Clefts, you must look to that first. If it be from dryness Cure it, as in Depraved tasting. If the Clefts are deep, dividing the tongue and causing pain, Cure them with dryers, as other Ulcers; adding some mollifying things, for the tongue which is naturally moist and soft: Such as shall be described in the outward Clefts of the Lips and Skin.

To which add this: Take *burnt Allum half a dram, true Bole two drams, with Honey of Roses and Mucilage of Gum Traganth or Fleabane*, make an Oyntment to anoynt the Clefts of the tongue.

In other Excoriations or Ulcers in the tongue and cheeks, or palate, or thrush, or ulcers of the Gums, creeping or other wise, corrupting, use strong dryers, by reason the part is moist: adding clensers, if there be foulness, and such as take down proud flesh. If there be Inflammation with the Ulcers, add cold repellers, as in the Inflammation of the Mouth was shewed: they bind and dry: Also if there be malignity, add things against it.

These are diversly applied, the Mouth may be washed, or they may be chewed, or used in smoake, or applied only to the Ulcers.

There are divers Mouth waters to be kept long where the Ulcer is.

A drying and clensing Decoction of Plants, sharp binding and clensing: Of Privet, Plantane, Mouse-

ear, Agrimony, Horſtayl, Sun-flowers, Blew-bottles, Olive leaves, Dayſies, Honey-ſuckles, Golden rod, Bramble, Yarrow, Herb Robert or Crains bill, leaves of the wild Pear tree, Beech tree, Solomons ſeal, Rupture wort, Ceterach, Myrtle, Maſtick tree, Hazel, roots and leaves of five leaved Graſs, wild Plumes, Comfrey, Barbery barke and Pomegranate peels, red Roſes, Pomegranate flowers, Acorn cups, Labruſca, Barberies, Barley, Lentils, Cypreſs, Myrtle ſeeds, Coriander, Slows, Sumach, Mulberries, Seruiſes and Gals. If the mouth be ſlymy and foul, add Sage, wild Time, or Gum, wild Mints, Bay leaves and roots of Flower-de-luce, and in the Scorbute, Scurvey Graſs, Water-creſſes and Brook-lime, of theſe or ſome of theſe make a decoction with water that hath ſteel quencht in it, adding a little Wine, or Roſe, Vinegar, or Honey, or Sugar of Roſes, or ſyrup of Roſes, Myrtles, Mulberries, or juyce of the Plants aforeſaid, or of Pomegragranat, with Vinegar, Salt, or Allum, or Vitriol to make it a little ſharp, or Bole, or juyce of Blood-ſtone ground.

It is excellent to uſe juyce of Oranges, Brook-lime, Water-creſſes in Ulcers of the Gums.

Another Decoction to dry ſtrongly: Take *Bole an ounce, burnet, Plaſter of Paris half an ounce, Allum two drams, Vitriol a dram*; boyl them in *white Wine*.

Or make Mouth waters of Aſtringents, diſtilled waters of Roſes, Priver, Plantane, Honey-ſuckles, and the like, with things aforeſaid diſſolved in them, increaſing their quantity, becauſe diſtilled waters dry leſs then Decoctions.

Or: Take *unripe Grapes three pounds, Purſlane and Plantane, of each two pound; whites of Eggs ſix, Allum a pound*, beat them and ſtill them, waſh Ulcers therewith.

It will be ſtronger, if before the ſtilling, you add *a pound of Pomegranate peels, three ounces of Vitriol, and four ounces of Vinegar*.

Or uſe this Allum water of *Libathious*: Take *juyce of Plantane, Purſlane and Allum, of each a pint; whites of Eggs twelve*, ſtir them and diſtill them in *Balneo*.

For Ulcers in the French Pox, uſe this water to repreſs Venom: Take *Treacle with Aqua vitæ and Vinegar* and diſtill a water from them. Or uſe this Gargariſme: Take *Roſe and Plantane water, of each two ounces; Aqua vitæ and Vinegar, each half an ounce; ſyrup of Mulberries and Honey of Roſes, each three drams; Treacle, Bole or Earth of Lemnos, each half a dram*.

Mouth waters of the juyce of Fruits, are made more pleaſant, then of Herbs, and cleanſe more, as Juyce or Wine of Pomgranates, or Wine that is ſharp and red, or Roſe Vinegar, or Vinegar of Squils alone, or mixed with other waters, Ulcers waſht with theſe will ſeem as it were boyled afterwards; therefore to make the dryers work better, we firſt waſh with theſe. Alſo juyce of Quinces, is excellent.

Some things chewed, leave their ſtrength in the Mouth and heal Ulcers, as ſharp Fruits, not ripe, as Mulberries, Cornil-berries, Quinces, Medlers and leaves of Privet, though not ſo pleaſant, theſe eaten Cure the Thruſh. And other Plants mentioned are good to be chewed.

Fumes are alſo good to dry, and thoſe of Quick-ſilver, though it cauſe Ulcers, when inwardly taken, yet the ſmoake taken in at the Mouth, doth Cure them.

Theſe following are alſo good. The Chirurgions uſe to anoynt the Mouth with Honey of Roſes and burnt Allum to cleanſe.

Or with the juyces of Herbs mentioned, mixed with Honey and boyled thick, the juyces of Mulberries and green Grapes are the beſt, theſe heal, and when we will cleanſe, we add Allum or white Vitriol.

Pouders made of Plants dryed are uſed, Honey, juyce of Grapes or Mulberries,

A drying Pouder: Take *Myrrh ſeeds, Bay-leaves, burnt Harts-horn or Ivory, of each half a dram; burnt Coral a dram*.

Another ſtronger: Take *Galls, Pomegranate peels, each a dram; Dates ſtones and Acron cups burnt, Cypreſs roots, each half a dram, red Roſes a ſcruple*.

This is ſtrongeſt: Take *Acacia, Hypociſtis, of each a dram, white Vitriol half a dram, Sal Gem a ſcruple, Angelica roots half a ſcruple*: make a Pouder.

A cleanſer for the Gums ulcerated: Take *Pumice ſtone two drams, Crab and Snail ſhells burnt, each a dram; Tutty prepared Allum and Tartar, each half a dram; Orris roots two ſcruples*: make a pouder.

The Pouder of Briony for the Cancer of the Gums: Take *Tutty prepared in roſe water two drams, Gum Traganth torrified a dram; Sarcocol, Morlick, Frankincenſe, each half a dram; Orris roots and Calamints burnt, of each a dram*: make ponder and mix it with *juyce of Briony*, dry it in the Sun then pouder it again, and add more *juyce of Briony*, do thus five times, rub the Gums with this Pouder and *Honey* till they bleed.

Or uſe Ægyptiacum for ſordid ulcers of the Mouth and Gums.

When the Gums begin to conſume: Take *roots of Comphory, Pomgranate peels, each a dram; Frankincenſe, Myrrh, each half a dram; Chalcitis burnt a ſcruple, white Vitriol half a ſcruple*: make a Pouder.

Touch Ulcers with ſtrong Liquors and after waſh the Mouth with Wine.

As with Inke, made ſtronge with Verdigreece.

Or with this green Water: Take *Verdigreece a dram, Orpiment a dram and an half*, pouder and boyl them in *white Wine two ounces, to half*. When it is cold, add *Roſe and Nightſhade water an ounce and an half*.

Or thus: Take *Verdigreece, Orpiment, Niter, Allum, each a ſcruple, and Galls as much*: Boyl them in *Roſe and Plantane water*.

A ſimple Decoction of ſublimate, is made with *a dram of Sublimate*, boyled in *Roſe or Plantane water*, touch the Ulcer gently therewith, or make it milder with *an ounce or two of Nightſhade water*.

Or thus: Take *Sublimate three drams, red Lead a dram and an half, Verdigreece, Vitriol, each half a dram; burnt Allum an ounce, Bole two drams, white Wine ten ounces, Roſe water two ounces*; boyl them.

Theſe Ulcers and the thruſh, and Ulcers of the Noſe are cured, by being gently touched with *Aqua fortis*.

Potential Cauteries, alſo of Lime and Wine Lees are good to touch Ulcers, if by art you can keep them from the ſound parts: but an actual Cautery is more certain, if it be uſed ſuddenly, for an Eſchar wil be made and when that is gone, the Ulcer will be cured.

CHAP. VIII.

Of Tooth-Ach.

The Kinds.

THe Tooth-ach is any pain in or about the Teeth, and it is either a true Tooth-ach, or ſuch only as a little diſturbeth. A true

Tooth-ach. A true Tooth-ach, is in or about one tooth, only sometimes in more, seldom in the Fore-teeth, but in the sides, and commonly but on one side, sometimes on both, sometimes in the upper, sometimes in the lower jaw, seldom in both, This is the proper Tooth-ach which is often and grievous.

Tooth-ach in Children which breed Teeth. This pain is in Infants that breed their grinders, which they declare by crying and restlessness, and it is known by the redness and heat of the Cheek, and when the teeth appear out of the swollen and open Gums, there is also a little Feaver known by heat and other signs. Sometimes convulsions, but not so dangerous, as when they come from other causes.

There is also a tooth-ach which comes to people of all Ages, from which few are free, especially such as have hollow or broken teeth. This is often violent and lasteth long or returns often, with stretching and beating, which they suppose they feel in the tooth it self, which is pained. The Gums are then very hot and red sometimes swollen with the Cheek, also which being swollen the tooth-ach abateth, sometimes there is an Impostum at the bottome of the tooth, and when that breaketh the tooth-ach ceaseth, and there cometh forth foul and stinking matter. And the Ulcer sometime remaineth long after, or turns hollow, peircing the lower Jaw and opening it self outwardly, sending forth wateriſh and sometimes thick matter for a long time.

Sometimes when these appear not, there is a great pain in the teeth, such as we use to feel at our Fingers ends in cold weather. In this the Patient spits much, and if the teeth be hollow, he seems to feel a cold Air coming from them, to his tongue, when he toucheth them there with.

Pain of the Teeth when a Tooth is drawn. There is a kind of tooth-ach, when a tooth is drawn, sometimes greater, sometimes lesser: but usually it is gone after the tooth is drawn, except by the violent motion of the part or hurt of the Instrument, or when a little part is only drawn out, there be a pain after.

Numnesi of the Teeth called Hæmodia. There is a Molestation, rather then pain in teeth at the time of eating, in the disease called *Hæmodia*, this is a pressing of the teeth, when one is longer then another.

The Causes.

The part affected. It is certain that that part is affected in in the tooth-ach which hath the sense of feeling and that most exquisitely, because the pain is great. But we have shewed that the teeth want all senses, because they are all the hardest of bones neither have they a Periostum or Skin about them, as other bones have and there is no Nerve that goes into them. Therefore not the tooth, but that part which is sensible and which is near the tooth, must needs suffer, and the reason why the tooth is thought to ake, is because the part affected is so near unto it. The part is commonly a membrane, which compasseth the holes in which the teeth are fixed, and which is next to the roots of the teeth: to which the Fibers or final branches of the Nerves, which go to both Cheeks, are so joyned, that they cause an exact feeling, so that the pain seems not to lie deep, but as it were in the very tooth.

Also the Gums, and the *Periostia*, or Membranes under the Jaws, if they be hurt, seem to communicate pain to the teeth.

The Diseases, with which these parts affected cause a seeming pain in the teeth, are either a hot or cold distempers, or Irritation, or Solution of Continuity.

A hot distemper and Inflammation, causeth Tooth-ach. A hot distemper with Flux of blood and Inflammation also sometimes, afflicting these Membranes, causeth the tooth-ach so called, not only by heat and stretching, but by swelling in a strait place, which causeth the teeth being hard to press upon them, this is a stretching and beating pain, which though the beating be in the little Arteries, under the Membranes, which beat upon the teeth, yet it is so manifestly felt, that *Galen* thought this beating and Inflammation also was in the tooth it self (which cannot be, because the tooth is a solid bone, having neither Veins nor Arteries, and therefore can neither be inflamed, nor beat:) though he wrote that he experienced this in himself. Moreover if there be a Flux of blood upon the Gums or Periostium under them, as is usual in the beginning or continuance of the pain which raiseth a new Flux, the pain is increased, and the more if there be an Impostum, till it be broken and made an Ulcer and send forth matter.

The cause of this Flux is as of other Fluxes: Namly fulness and heat of blood, or pain that was before from another cause, which raiseth the Flux and doubleth the pain: or other external causes.

A cold distemper, causeth Tooth-ach. A cold distemper by its enmity to the Nerves and Membranes, afflicting these parts, causeth also pain, called also the tooth-ach, from the Vicinity or nearness. It is so bitter and often, that it is no wonder the vulgar say that cold is an enemy to the teeth.

This comes from external causes, as Air, Meats or Drinks that are cold, that suddenly cool the teeth and make the Membranes adjoyning sensible thereof. And it comes sooner when the tooth is hollow or broken, and the cold strikes presently to the Membranes. Hence it is that bad teeth are sooneſt pained, and the pain is thought to be in the teeth, though they are dead and not as formerly, which no reasonable man will say can be sensible.

This comes also from a cold flegmatick Defluxion not upon the tooth which cannot receive it, but upon the Membranes underneath. And there is then a tooth-ach, without signs of heat, but of cold, as if cold wind come from the hollow tooth, as I shewed: Except the pain causeth a Flux of blood, and then heat, tumor and impostume may follow.

Irritation or provocation, is the cause of Tooth-ach. Also Irritation of this very sensible Membrane, may cause this pain called the Tooth-ach.

This comes to the Membrane from the proper tooth when it is broken, or discovered from its place, or otherwise unuseful, then it hurteth the Membrane in chewing or keeps them from chewing on that side.

This also may come from pricking the hollow tooth or from hard meat gotten into it, in chewing, because the Membrane cannot endure the touch of a strange body.

And if the teeth be whol and yet there be a force to put them out of order, especially when pained, or of any thing be gotten between them in chewing, which sticketh close, because then the teeth are thrust at one side and the Membranes that grow to the roots of them

are conſtrained there is alſo pain. Therefore men are very buſie to pick there teeth when any things get either into the hollow of the teeth, or the ſpaces between them.

Roughneſs of Teeth, cauſeth Hæmodia, or an edge upon the Teeth.

Moreover not only when the teeth are fowl or ſtreight bound or forced aſide are theſe Membranes provoked: but when they are exaſperated and looſe their ſmoothneſs; and then the Membranes feeling this roughneſs and unevenneſs are pained in chewing, as if ſome ſtrange body were faſtned to them, as we ſhewed in Hæmodia, with a numneſs (as we ſhewed in the hurt of touching) from the coldneſs of thoſe things, that make the teeth rough infecting the Membranes, ſo that the teeth ſeem to be num, by whom the Membrans are ſo affected (but this is but imaginary, for they are inſenſible.) this exaſperation & cold comes from eating of ſome kind of fruit, or from ſome humor like ſuch fruit or from ſome humors like ſuch fruit, or from vomiting and firſt the teeth and then the Membranes, as when they are ſower: by their binding and ſharpneſs (which is an enemy to the Nerves and bones) they peirce and afflict the teeth and their Membranes. And the ſooner when the teeth are ſoft and not grown hard with Age, therefore is this more uſual in young then old people.

Alſo the Tooth-ach comes from a Defluxion of thin ſharp, & ſalt flegm, which provokes the Membranes rather than cools them, & uſual to them that are troubled with ſuch Excrements, and to ſuch as the Flux falls thither from a looſeneſs and weakneſs of the part through bad teeth, or the like. And to ſuch that ſpit much, and have much humor come from their Noſtrils.

Solution of continuity, cauſeth Tooth-ach.

Solution of Continuity alſo cauſeth the ſame ſame, as when a Tooth is drawn from the Membrane under it, and the Gums that grow to it, and it is the greater pain when the Root is deeper, as in the great Teeth. And when it grows to the Jaw, ſo that ſome part of it comes away therewith, which cauſeth great accidents. As befel a Merchant my Country-man, of whom we ſpake in Pains of the Mouth, who had after the drawing of of a tooth an Inflammation and Cancerous Ulcer which tormented and killed him. This is thought to be eaſily done by the common Chirurgeons if the Dog or Eye-tooth be drawn.

Alſo in Infants while the teeth grow and pierce through the Gums, if they be great teeth eſpecially this pain may be by ſtretching the Gums. And though this pain comes only from the Gums, yet it is called the *Tooth-ach*, as other pains mentioned from ſolution of Continuity, in which the ſenſible parts mentioned do rather ſuffer than the teeth.

The Cure.

The Cure is according to the diverſity of the Cauſe as it comes either from a Defluxion of blood or other excrements, or from a cold diſtemper or provocation, from rotten teeth or other compulſion or exaſperation, or from ſolution of Continuity when the Gums are pierced, or the teeth drawn forth.

The cure of Tooth-ach from a hot diſtemper or cold, or from flux of Blood or flegm.

If tooth-ach come from flux of Blood or Water, then take away the cauſe of the Defluxion by keeping the humor from falling upon the part, and ſending it another way, and conſuming it, and correcting the diſtemper which comes from thence, and in the mean while aſſwaging the pain, by theſe means.

Blood-letting at firſt when it is from a bloody flux, and there is pain of the Head, is good to revell or draw away from the part.

Alſo Scarification and Cupping in the Neck and Shoulders is good in all Defluxions: By theſe means at certain times uſed, the Vulgar prevent the tooth-ach. And to take it away, uſe Scarification in the Wriſt, or in the back of the Hand, between the thumb and fore-finger, on that ſide the pain is.

We divert theſe Defluxions alſo by Veſicatories and Cauteries as others. And apply Veſicatories to the Wriſts and back of the Hand: as a head of Garlick ſtampt.

And we uſe Frictions and Ligatures, as in other Defluxions.

And Purgers by the Noſe in a flegmatick Defluxion to divert it from the part affected. By blowing the Noſe often, and uſing of Errhines or ſneezings to the Noſe, amongſt which juyce of Brooklime and Marygolds is accounted the moſt proper for the tooth-ach.

Alſo things that draw flegm from the Mouth which ſhal be after ſhewed: But this muſt be done after general purging, eſpecially if humors abound, and are flowing, leſt evacuations by the Noſe and Mouth draw the humor more to the teeth.

We alſo purge by ſtool with divers medicines, as in other Defluxions.

And apply things to the temples in all humors to keep them from the teeth, uſing ſuch things as were mentioned in Defluxions of the Eyes, eſpecially Plaſters in the hollow between the Forehead and the temples, upon the ſide pained night and day, which ſometimes retain the humor flowing, that the pain ceaſeth, and cometh to the temples.

If the Defluxion be hot, in the beginning we apply to the teeth aſtringents that heat not, to repell it, but when it ceaſeth to flow, we apply to the teeth things that diſcuſs and conſumes the humor. In a cold Defluxion, at firſt we uſe hot things with Repellers, after very hot things alone. In all caſes adding things that allay pain. Theſe are of divers forms, ſomtimes to be held between the teeth, or otherwiſe applied to them, or put into the hollow, or uſ'd as Fumes or Smoak, they are made of the following ingredients.

When we aſtringe chiefly, and ſo ſtop the Flux, we make Decoctions to be held hot in the Mouth, as the Decoctions of Tormentil which is beſt, and of Vervain boyled in Wine, and of the inward bark of an Aſh.

Or this compound Decoction. Take *roots of Tormentil, Snakeweed, five-leav'd Graſs, Mullein, each half an ounce; Cypreſs roots two drams, bark of Box tree, or Mulberry and Capars, each half an ounce; Ivy, Vervain, Plantane, each a handful; Pomegranate flowers and red Roſes, each a pugil: Cypreſs Nuts, Galls, and Acorn cups, each two drams; Coriander ſeeds, Myrtles and red Sanders, each a dram;* boyl them in *red Wine*, and *Vinegar*, if you will have it ſtronger.

Roſe water is good to bind with *Plantane water, red Wine* and *Vinegar*.

Water of Mullein is counted excellent.

Or: Take *filings of Iron a dram and an half, Vitriol a dram:* boyl them in *Wine* and *Vinegar*.

After the Defluxion add ſome hot things thus: Take *roots of five-leav'd graſs or Tormentil an ounce, roots of Pellitory half an ounce, Cypreſs roots two drams, Leaves of Ivy,*

Ivy, Sage, Hyſop, each a handful; red Roſes, Lentiles, each a pugil; white Poppy ſeeds two drams, long Pepper a dram: boyl them in *Wine.*

Or thus: Take *Sage, Hyſop, Vervain, each a handful:* boyl them in *a pint of Wine:* add *two drams of Allum.*

Or: Take *Galls, Snakeweed roots, each two drams; Orris roots a dram, Hyſop a handful, Frankincenſe, Sandarach, each two drams; Juniper berries an ounce:* boyl them in *red Wine.*

Or: Take *Maſtich an ounce, Sage, Hyſop, each a handful:* boyl them in equal parts in *Wine* and *Vinegar.*

Or this Pouder: Take *Snakeweed roots a dram, Allum and Pellitory, each a ſcruple:* make a *Pouder,* apply it or rub therewith.

When we wil heat chiefly, hold theſe Decoctions in the Mouth, ſo hot as may be, and take it in again as faſt as it cooleth.

The Vulgar uſe roots of Pellitory, or Pepper, or Ginger boyled in Wine.

Another: Take *Calamints, Organ, Pennyroyal, Hyſop, Sage, each a handful; Marjoram, Bay leaves, each half a handful; Juniper berries half a pugil:* boyl them in *Wine.*

Or this which hath often profited: Take *wild Time, Sage, Roſemary, each a handful; Ginger a dram, Caraway ſeeds half an ounce, red Peaſe, Salt, each a pugil:* boyl them in *white Wine.*

Or this: Take *Pellitory roots half an ounce, Angelica roots, each two drams;* add *Garlick and Radiſh, Hyſop, Savory, Sage, Marjoram, Pennyroyal, wild Time, Roſemary flowers, and red Roſes, each a dram;* or *a handful* if they be freſh, *long and black Pepper, Cubebs, grains of Paradiſe, Cloves, Muſtard ſeed, Gith and Stavesacre, each half a dram; Salt or Niter, each two drams:* bruiſe and boyl them in *Wine,* or infuſe them, and uſe the ſtrained *Liquor.*

The Decoction of Coloquintida in Wine is bitter, but very profitable.

Sage and Roſemary diſtilled in Wine is alſo good.

Alſo *Aqua vitæ* or Spirit of Wine or Juniper berries applied do work quickly and ſtrongly.

Or this: Take *Pepper, Ginger, grains of Paradiſe, each a dram; Cloves two drams, Cinnamon half an ounce:* add *white Wine,* ſteep and diſtil them.

Or thus: Take *Pellitory, long and black Pepper, each two drams; Muſtardſeed, Water-creſſes and Gith ſeed, each a dram:* pouder them, and with *Aqua vitæ* uſe it as the other.

Or of the ſimples in the hot Decoction mentioned dried and poudered, make an Infuſion and Diſtillation.

The Oyl of Juniper berries, or Spike, or Spices diſtilled, and dipt in Cotton, and put into the tooth doth well.

Sometimes we uſe Bags to the teeth to be bitten by the tooth affected thus made: Take *Sage leaves,* and bruiſe them, and with a little *Salt* and *Pepper,* make a *Bagg.*

Or thus: Take *Pellitory, Pepper, Muſtard ſeed, Salt, each equal parts;* pouder them for a *Bag,* dip it in hot *Vinegar* and apply it to the teeth.

Or thus: Take *Pellitory, long Pepper, Stavesacre, each equal parts:* make a *pouder,* and apply it in a *Bag* ſprinkled with *Aqua vitæ.*

Sometimes we give things that inflame the Jaws, as bark of Laurel taking of the outward rind that is hard, alſo the roots of Spurge and Crow-foot, according to *Dioſcorides,* theſe are put between the teeth, leſt they ſhould burn the Jaws by touching them, but if you boyl them in white Wine they they are milder.

This latter Decoction is ſo uſed, made of Solomons ſeal roots, and white Hellebore, and bark of Laurel in Wine and Vinegar.

The Anodynes following are alwaies to be uſed, when the Deſtuxion ceaſeth eſpecially, becauſe they work by propriety.

Hot Milk, Butter, and common Oyl, or Oyl of ſweet Almonds are good to be held in the mouth.

Alſo Bread chewed and applied as a Cataplaſm between the teeth and Cheeks.

Alſo warm Broath and the Decoction of Marſh-mallow roots, Bread, and Lineſeed in Milk.

Another that draws forth water. Take *roots of Marſhmallows and Liquoriſh, each an ounce; Sage a handful, Figs twelve, Fænugreek ſeeds an ounce:* boyl them in *Water.*

A Decoction of Guajacum and Salt is commended.

Or Leaven applied with Vinegar in the Decoction thereof held in the Cheeks.

Or this: Take *Sandarach or Varniſh half an ounce, Wine or Vinegar, or both four ounces, or ſix:* boyl them ro the conſumption of the third part, and hold it in the mouth, or diſſolve Sandarach in Vinegar and apply it.

Gum Galbanum, Ammoniacum, Sagapenum, alone, or ſoftened with *Aqua vitæ* and Vinegar put into a hollow tooth, or ſpread and laid as a Plaſter to the teeth, cures the tooth-ach.

Or this: Take *Camphire half a dram, Aqua vitæ an ounce:* boyl it til the *Camphire* be conſumed, and apply it: or with *Wine* and *Vinegar.*

Alſo Camphire and Oyl of Cloves, or of ſweet Almonds, or Oyl of Camphire.

The pouder of Camphire with the pouder of Henbane root equal parts, ſuddenly taketh away the tooth-ach, the ſeeds of Henbane may be uſed for the root, and they wil be ſtronger.

A Snakes Skin alſo boyled in Wine and Vinegar, or dried in an Oven, or burnt to pouder and mixt with Oyl, to anoynt the teeth is commended, or the Skin of a Toad uſed the ſame way, is an excellent medicine.

Dioſcorides writes that the prick in the tail of the Fiſh *Paſtinaca* applied to the tooth takes awy pain.

In great pain we uſe Stupefactives with caution that they be not ſwallowed.

As the Opiate Antidotes freſh made as *Philonium Romanum,* Treacle, Mithridate, to rub the teeth, to a dram of which a ſcruple of Pellitory and Nigella or Gith ſeed, and a grain of Opium may be added.

A ſmall pil of Opium alone put into the tooth preſently takes away the pain, and it is good to add a little Wax that it may not fall out.

Or this: Take *Opium and Henbane ſeed, each four grains Smallage ſeed two grains,* with *Aqua vitæ* make *Pils.*

Or thus: Take *Camphire a ſcruple,* boyl it in *an ounce of Aqua vitæ* til it diſſolve, then add *Opium three or four grains,* dip a little *Cotton* therein and thruſt it into the tooth.

Or thus: Take *of ſpirit of Wine two or thre ounces,* add *Camphire two drams,* ſet it in the *Sun* til the *Camphire* diſſolve, then diſtil it: apply this ſpirit as the other.

Other Stupefactives are made of Henbane ſeeds, Pepper, roots of Pellitory and burnt Allum equal parts made up with *Aqua vitæ* into a Mas.

Or thus: Take *Henbane ſeed half a dram, Pellitory and Ginger each two drams; Smallage ſeeds a dram, Maſtich three drams, Roſes a pugil:* boyl them in *Wine* and *Vinegar* to waſh the Mouth.

Or: Take *roots of Mandrake a dram, Henbane ſeed half*

half a dragm Pepper, Cubebs and Staveſacre, each a dragm, Pellitory two dragms, bark of the root of Mulbery and Capars three dragms. Boyl them in red Wine.

Or Take *Henbane roots a dragm, white wine half a pint.* boyl them.

Or uſe fumes with a Funnel to the teeth, made of wormwood, Savory, and the like hot herbs, in wine and water, and take the vapor hot, add leek ſeed to make it ſtronger.

Alſo a fume of Sandarake caſt upon live coals, or leek or onion ſeed mixt with pitch and wax to make the fume thicker: the fume of burnt henbane ſeeds is accounted beſt, but it is beſt when the ſeed is firſt mixed with virgins wax.

Somethings are to be applyed to the cheek outwardly, to take away pain.

An Anodine emplaſter. Take *Crums of bread the pap of apples, each three ounces:* boyl them in *milk*, add *Lineſeed, oyl of Roſes or of Chamomile, each an ounce, Saffron a ſcruple.*

Or uſe Treacle or other opiats for a plaiſter.

Another approved, Take *the white of an egge*, beat it with *Roſe water* and ſpread it upon flax with a litle pouder of *Pepper*, and apply it all over the cheek where the pain is.

Or thus, Take *the yolke of an egge with Aqua vitæ and a litle Saffron, with ſome meal or flower*: make a plaſter to diſſolve the tumor,

In a hot Cauſe. Take *juice of Nightſhade and Houſleek, each two ounces, Roſe-water and Milk, each an ounce and an half, Oyl of Roſes an ounce*: ſtirr them and dip a clout therein, apply it to the Cheek.

In a cold cauſe thus. Take *roſted Onyons three ounces, oyl of Dill and Chamomile each an ounce, flower of Fœnigreek an ounce and an half*: make a Plaſter.

Or thus, Take *Lilly roots three ounces, Mallows an handful, flowers of Chamomile, Melilot, Dill, each a pugil: Fœnigreek and Lineſeed, each half an ounce: Cabbage ſeed two dragms, Peach kernels or bitter Almonds an ounce.* boyl them in wine, foment the Cheek without, heat the reſidence of the Decoction, and with *oyl of Chamæmel* and *Dill*, make a *Cataplaſme.*

Alſo apply *baggs of Millium or Panicum, Wormewood, Chamæmile flowers, Dill and Salt.*

Juice of Garlick, Rue, Ivy, Daffadil roots: dropt into the contrary eare, Cures the toothach.

Alſo *hot oyls* as of *Rue, Bayes, Coſtus, Earthwormes*, with *Caſtor* boyled therein the diſtilled oyls are beſt.

Or five Ivy berries, boyled with oyl of roſes and pomegranate peels, and the liquor dropt in doth it according to *Diaſcorides.*

A Clove of Garlick peel'd and put into the ear on that ſide the pain is, cureth.

Among Amulets the roots Lepidium hung about the neck, cureth according to *Diaſcorides.*

If a tumor ariſe on that ſide inwardly or outwardly, or on both ſides, and the pain abateth: then it goeth away of it ſelf, or with bags or hot oyls, very eaſily.

If pain increaſe with the tumor becauſe then there is an Impoſtume, the Anodyne Cataplaſme wil do wel to ripen it.

Eſpecialy Barley meal boyled in milk and Olibanum added in pouder, and applied ripens the Impoſtume.

Alſo hot milk held in the mouth in which roots of Marſhmallows, Lineſeed, Houſleek and Lillyes are wel boyled.

The Impoſhume opened of it ſelf inwardly, or by force turnes to an ulcer, which wil cure of it ſelf: or with the remedies mentioned in the ulcers of the mouth, if it come outwardly it is eaſier cured as another ulcer: but if the teeth are rotten and the ulcer reach them, it wil hardly be cured til they are drawn, and there is comonly a disfiguring ſcarr left after the cure.

The Cure of the Toothach from a ſimple cold diſtemper.

If the toothach come from a cool diſtemper from the matter flowing thither, the cure is mentioned in a flegmatick defluxion by hot means: which cureth a ſimple diſtemper: Then take heed of al actualy cold things, as Air meat and Drink and medicines, becauſe cool things are ſo averſe to the teeth, that in a hot cauſe, actualy cool things are not good though they give eaſe, but after rather increaſe the pain.

If toothach come from rotten teeth, it will hardly be cured, and return eaſily, and if a defluxion be, cure it as we ſhewed in a defluxion.

The Cure of toothach from Irritation, from teeth rotten or bound.

If toothach be from hollow teeth: Take heed that nothing gets in, and chew upon the ſound ſide, or chew wax or maſtick afore to fil the hollow, but experience teacheth that that may cauſe as much pain as the meat. And therefore that is better in ſtinking breath cauſed by meat corrupting in the teeth as we ſhal ſhew.

When rotten teeth bring ſuch trouble and pain, upon every light occaſion, and infect their neighbors, eſpecially if they be unuſeful, they either muſt be drawn by the arts mentioned in corrupt bones, or the place under them muſt be made inſenſible: This is done by burning in the cavity with *Aqua fortis* or fig milk, or Spurge or Sory, as *Diaſcorides*, taken in with Wool or Cotten and ſtopt in with Wax from falling out, this done, often breaks the teeth out, or burn the rotten teeth with a hot Iron, that the part under may looſe ſenſe, and the tooth fall out.

If any trouble follows drawing, becauſe the teeth wil be bound by things that get in between them, uſe a toothpicker of maſtick wood or juniper, uſe it gently in time of pain, for a litle thing diſturbs, as only the motion of the tongue againſt them when pained, or picking with your fingers, and they who think to abate pain by picking, are miſtaken, and increaſe it rather.

The Cure of Hæmodia or teeth on edge.

If from the edg or roughneſs of the teeth you chew with difficulty, chew purſlain til it be gone, it is a certain and ſure remedy.

Crums of bread or toſted cheeſe or a yolk of a hard egge chewed hot, doth, it but not ſo quickly.

Or Almonds, or Nuts, or Wax and ſalt chewed.

The Cure of Tooth-ach in children that breed them.

If children feel pain when they breed teeth, from the peircing through their gums, then anoint the gums with the brains of a Cony or Hare, boyled in Wine, or with ſweet Butter and Honey, and other gentle mollifying things, often.

Mathiolus ſaith the ſtone found in the head of a Snail without a ſhel, wil do the ſame.

If the Gums are too hard, and hinder the teeth, which cauſeth great ſymptomes, as Convulſions, Fluxes, called *Diarrhæas* and Death, then preſently cut them with a Lancet, this may be done ſafely without fear of inflamation, pain or bleeding: By this means I ſaw a famous Chirurgion cure many.

We ſhal ſhew the cure of other accidents in their places.

The

The Cure of pain from a tooth pulled out or drawn.

The pain that is while the tooth is drawing goes away when it is out, & that also that went before, for which cause the tooth was drawn. But if it be only moved or broken, it is worse, and the Patient must suffer again at the drawing of the stump. To stay bleeding is dangerous if it continue; and when an Artery is broken, the Cure whereof shall be mentioned in Hæmorrhages or Bleeding.

CAHP. IX

Of Pain in the Jaws.

The Kinds.

THe Kinds of pains in the Jaws or Throat, either in the uper Jaw, which is the receptacle into which the two Tonsils meet like an *Isthmus*, and in whose middle there is a Caruncle or lump of flesh called Gargareon root, or Palate: or those pains which are in the lower Jaw joyned to the Neck, whether in one place or more, or these pains which reach to the parts of the Mouth mentioned: are distinguished first as they move divers Senses, Somtimes there is a roughness only or troublesome imitation, somtimes a true pain, which is either stretching, or burning, or ulcerous.

Roughness of the jaws.

Roughness of the Jaws is most hurtful to the Voyce, and therefore declared in Hoarsness.

An irritation in the jaws.

Somtimes there is felt an Irritation with endeavor to Swallow or Vomit.

Falling the Gargareon Uvula or Palate

And then either somthing itches in the Jaws, or the *Gargareon* or *Uvula* being grown longer and thicker hangs upon the Jaws, and if it stop them any way, it causeth difficulty of breathing and speech. the enlarging of which is called *Columella* or κιων in Greek, or the falling of the *Uvula*.

A stretching pain in the jaws with difficulty of Breathing.

A stretching pain in the inside of the Jaws, when a Cavity appears in the Neck by reason of the Vertebra or bone thrust out, hindereth Breathing of which we spake in the defect of breathing. This from the likeness of a Squinzy, we called *The sixth kind of Squinzy*, which is very seldom seen. There is often this stretching pain from a Desluxion (as we shal shew in the causes) without Burning or Inflammation, sometimes with straitness of Breathing: somtimes with hinderance of Swallowing and Voyce: sometimes with somtimes without a swelling in the Jaws, or outwardly in the Neck. And this Disease is called *A bastard Quinsie*.

Paristhmia what.

With the accidents whereof, the tonsils or Almonds somtimes swel in one or both sides round like a Ball, and appear open like a Spunge, This is called *Paristhmia*.

An inflaming pain in the Jaws with difficulut Breathing.

A true Quinsie or Cynanch.

There is a Burning, Sharp, and Pricking pain, also in the Jaws in the Disease called *A true Quinsie* with difficulty of Breathing, which is small and often, and fetcht with sighing, sometimes that endangereth Suffocation, so that Breath cannot be fetcht but by holding the Neck upright, & men gape like tired or mad Dogs. This Disease is called *Cinanch*. In this swallowing is hindered, & Drink comes forth at the Nose, or it is swallowed with difficulty, & the endeavor increaseth pain. There is often a Fever joyned with it, and the accidents thereof, as Heat, Redness of Face, Thirst seen also by the Pulse and Urin. There is somtimes a manifest tumor, somtimes not, for which cause there are three sorts of Quinsies; for if there be no tumor nor Inflammation within or without, it is the first time in which are the worst accidents: But if a tumor appears in the straitness of the Jaws, it is the second kind and hath great symptoms, but if there be an outward tumor in the Neck, it is the third kind, and the symptoms are least.

Antiades

Uva or Uvula.

There is a tumor with Redness and Heat in in the tonsils or Almonds, this is called *Antiades*. Somtimes this pain is in the roof, and is called *Uva* or *Uvula* when it swells or grows black with Inflammation. In these the accidents are mild, as in the gentler Quinsie, except that meet with it. If the Inflammations in these three places turn to Imposthumes, pain and other accidents increase, and when it is broken they abate and an Ulcer followeth.

Consumption of the Roof.

Somtimes there is an ulcerous pain in the Jaws, either in the upper part of the throat, or in the Almonds or roof, with an Ulcer reaching to the Palate, and somtimes the roof is consumed wholly in part, or this pain is felt below, or deep, and follows the Quinsie mentioned, and matter is spet forth. Or if it come alone, the pain reacheth downwards to the stomach with great burning, especially when they swallow, which is hindred: But when it is in the upper parts it hinders swallowing, breathing, and voyce also.

The Causes.

The part affected.

The Cause of these Diseases, namely of Molestation with Irritation (we spake of roughness of the Jawes elsewhere) and of pains, with Distension, Inflammation and Ulcer, is either in hidden parts, as in the muscles of the Jaws and parts adjacent, or in the lower Glandules joyning to the rough Artery, or in the passages through the inside of the Neck, *Oesophagus* or Gullet (for the Diseases of the rough Artery are described in defect of Breathing) Or is in manifest places of the Jaws, as in the tonsils roof or the tunicle by which it gets often to the Palate. The cause of all these pains is either a Flux of Blood or excrements, or solution of continuity. Of solution of Continuity, we spake in Defect of Breathing, how it comes from a Vertebra or Bone started in the Neck, which causeth sixth kind of Quinsie.

Inflammation of the Jaws, Tonsils, Roof, is the cause of a true Quinsie, the Antiades or Uvula.

If Blood fall into the Muscles of the Jawes it causeth a true Inflammation or Quinsie, which is gentler or worse, as the Flux is more inward or outward. for if it fall upon the inward Muscles of the *Larynx*, Jaws, and bone called *Hyodes* which serve for Breathing, Voyce, and swallowing, because the pain is great, and as it were suffocating, it causeth the first and worse sort of quinzy. But if it fal upon the outward muscles of the neck, it less hindereth those offices, and causeth a gentler quinzy, which manifesteth it selfe with an external tumor,

which

which is the third sort. But if the Defluxion fall upon both inward and outward muscles, it is between both, & causeth the second sort of Quinzy, in which the tumor is not so hidden as in the first, but may be seen in the inside of the Jaws: Thus we better distinguish Quinsies, than as the Defluxion falleth upon this or that Muscle for they being hidden it cannot be discerned by us upon which they fal) to call them *Cynache*, *Paracynanche*, *Synanche*, *Parasynanche*. Moreover if the blood flow rather upon the Glandules on both sides of the rough Artery, which are easily inflamed by reason of the veins into which they are wrought, there is a kind of Quinsie (and rather because the Muscles adjacent are also inflamed) better or worse as the Inflammation is spread in those muscle. If the Defluxion falls upon the upper Glandules or tonsils, or upon the Weasand, it causeth the Inflammation of those parts called *Antiades* and *Uvula*. these Inflammations spread to the parts adjacent, and are more usual than a Quinsie, because the Blood wil sooner flow to these lose Glandules that have many great Veins than to other.

The Inflammation of the Gullet and its Causes.

If it fall upon the Gullet or *Oesaphagus*, which is seldom, it causeth a far greater pain, especially in swallowing, from the beginning of the Gullet to the very Stomach, but not with such difficulty of breathing, except it extend to the parts adjacent.

The Cause of this Flux of Blood and Inflammation that cometh from thence is the same with that of other Inflammations, namely plethory or fulness of Blood, or Heat, or thinness of the same, which sends it self thither rather than to another part by reason of the disposition of the place: this comes often from a Synoch Fever, when the Blood is first burnt in the Veins, and then a part therof is sent thither (as I shewed in Fevers) hence Quinsies and Inflammations of other parts, as Gullet, Mouth, Tongue, are the symptoms of these Fevers, that begin with them, or come presently after them. Also Blood carried thither from other Causes may make Inflammations in the Throat, but a Fever is not joyned therewith, except it come from other Causes. But it may come from the pain which these parts receive from other Diseases, or from Inflammation of the Jaws, by actually or potentially hot things, as Pepper, Cuckowpints, Laurel, given in jest sometimes. Or from very cold Drink while the body is hot, by reason of the sudden repercussion, when the blood flieth back and returneth again with force, because the blood is stir'd up and sent out of the Veins; except it come from a Synoch, as we said: Also I observed that this came from too much straining in Child-bearing, the blood being driven to the upper Veins of the Neck in a Woman that died. And it is probable that it may come from other strainings, roaring, or holding breath at going to stool.

A defluxion into the Jaws, Tonsils, Palate, is the cause of a Bastard Quinsie, falling of the Almonds, and Uvula.

A Humor falling from the Head, under the tunicle of the Palate, if it be carried to the Muscles of the Throat wil cause a Bastard Quinsie: which is stronger or weaker, as the Flux is upon the inward or outward muscles, as we shewed in the Flux of Blood: and for that Cause wil cause a tumor more or less apparent, but if the Flux fall upon the upper Glandules or Tonsils, or the Palate only, which being a loose and soft piece of Flesh easily receive the humors, it will cause the *Paristhmia* and *Columella*.

The natural and efficient cause is the same with that of all Defluxions, the adjuvant or helping cause is a fitness of the parts to receive it, because they are close under the Head, or because they are loose or weak; and they are sooner hurt if they have formerly been offended from other Causes.

An Ulcer in the Jaws Tonsils, or Almonds, Palate, Gullet, is the cause of an ulcerous pain and Consumption of the Palate.

The Solution of Continuity causeth pain expressing the sense of an Ulcer. This is an Ulcer, an Excoriation, or Rawness, or Wound in the Jaws from divers causes. An Ulcer comes often after the said Inflammations of the Jaws, Tonsils and and Palate suppurated and turned to an Imposthume after breaking. or from a sharp defluxion that first caused a tumor, or presently exulcerated, there comes an Excoriation of the tunicle of the Jaws, Tonsils or Gullet, which infects the Palate, and eats upon other parts adjacent. Also it may come from a malignant matter which seizeth upon the membranes so much in the Leprosie and French Pox, hence come those stubborn Ulcers in the Palate, and Jawes, and Nostrils, that eat up the Glandule and Uvula. Also the Gullet may be cleft and excoriated from Vapors that are hot and sharp in malignant and sharp burning Fevers, from whence they may feel pain a long time after in swallowing, down to the Stomach. Also a pain in the Gullet may be from sharp and pricking things fallen by chance into the Jaws and Gullet, that wound them, and the greater if there be an Inflammation. If these wounds come externally they shall be spoken of in external wounds.

A Wound in the Jaws and Gullet, causeth an ulcerous pain in them.

The Cure.

Prædiction or Foretelling.

If these diseases come from a defluxion of humors upon the parts of the jaws, and there is Inflamation in the first sort of a true Quinzy, it is very violent and kils in eighteen houres space, the other is sharp and is judged the second third or fourth day at farthest; The hope of Cure is more when the tumor is outwardly, and admits of applications, and may be better clensed when broken. The third is less dangerous, because the tumor is outward. That which is in the lower Glandule is more or less doubtful of Cure, as it is joyned with any kind of Quinzy. The safest is the Inflamation of the Tonsills and Palate because they are more visible, or of the Gullet to which Remedies may be swallowed, except the Inflamations bring greater danger by spreading to other parts. But if a Defluxion of any other humor cause a bastard Quinzy, it is not without danger if it obstruct inwardly, that is better which extends outwardly and causeth a tumor in the Neck. That humor that fills the Almonds and Pallate is easier cured.

The Cure of a true and false Quinzy, Paristhmia, Uvula Columella, or Gulet inflamed or swallow, by taking away the Cause.

As for the Cure, it differs as the Defluxion is of blood, or an Inflammation of the Jaws, or Almonds or Tonsill or Palate or Gulet the cure of which agrees in many things, or as the Defluxion is of another humor upon the Jaws in a bastard Quinzy, or upon the Tonsills or Uvula or Gulet, then the cure differs from the former. In al we proceed as followeth.

In every Inflamation of the Jaws, or any part of them a vein is to be opened when it is great, or to pre-

vent

vent it from being great, especialy when the body is plethorick, in a Quinzy especialy it must be quickly done, open a vein in the arm first for revulsion, that that which is most visible or the cephalike or head vein which is most usual, or that by the thumb, bleed soundly, and if need be often, *Hippocrates* perscribes the vein under the breasts to be opened for women, or that in the foot, if their courses be stopt. In women with child bleed also but sparingly, after revulsion open that vein under the tongue for derivation, the same day, or presently after, because the disease is acute. *Archigenes* opens the forehead vein, others that in the neck. In a cold Defluxion if there be pain or streightnes, bleed also.

Cupping glasses to the shoulders neck and under the breasts, do the same, especialy if they be placed in a Quinzy in the top of the neck upon the second *Vertebra*, that they may breath and swollow better and they are better with scarification, which is good also under the Chin and in the Cheeks, also Horsleeches may be applyed instead thereof, and in great necessity, Vesicatories and Causticks, to the neck or head, this is done by way of prevention to those that are subject to this disease, all these are good in other Defluxions.

Also Frictions and Ligatures and washings are good in al Defluxions, to cause revulsion.

We apply to the head things that stop fluxes, and strengthen it, after purging.

An Emplaster for the crown or hinder part of the head, Take *Pitch two dragms, Frankincense, Mastick, Labdanum each a dragm, with Gum Ammoniak dissolved in Vinegar*; Make a large round plaster.

A stronger drawer, Take *Pigeons and Mouse Dung two dragms, seeds of Melanthium infused in vinegar a dragm, Frankincense, Mastick, each a dram and half, with Galbanum dissolved in vinegar and honey anacardine.* Make a Plaster.

A Pouder for the Head morning and evening, after rubbing and combing: Take *Mastick, Gum of Ivy each a dram and half, Citron peels, Galangal, red Roses, Organ, Gith seeds, and Coriander prepared in vinegar, Bay berries, red Saunders, each a dram, Nutmegs and Cloves each half a dram, grains of Kermes two scruples, Salt a dram.*

When other medicines cannot be swollowed, use Clysters, before bleeding, and after if need be, to provoke stools and draw down humors.

If the Inflamation of the Jaws come from flux of blood, of what kind soever, give emollient and cooling Clysters as in Fevers, as this: Take *the common Decoction, Cassia an ounce, course Sugar an ounce and an half, oyl of Violets three ounces, with a little Salt.*

When you wil provoke more and draw down, Take *Mallowes, Beets roots and all, an handful, Bran a pugil*, boyl them; add *Honey of Violets, an ounce and an half, Electuary of the juice of roses half an ounce, Hiera picra two drams, oyl of Violets three ounces, with juice of Mercury or Beets an ounce, and a little Salt*, make a Clyster.

If a bastard Quinzy come from a wateriſh defluxion, or swelling of the tonsils, or falling down of the Uvula, use Clysters prescribed in those Defluxions.

Or this, Take *Mallows, Marsh-mallows, Arrach, roots and all, each an handful, Orris roots an ounce, Sage and Marjoram, each half an handful, Chamamel Melilot and Lavender flowers and Bran each a pugil, Carna seeds two drams*; boyl them, add *Hiera Colocynthidos three drams, Honey of Roses two ounces, oyl of Chamomile and of Nuts, each an ounce and an half, with Salt*, make a Clyster.

we use Errhines to the nose to divert, Flegm from the tonsils and Palate, or masticatories that cut Flegm, and fetch it from the Jaws.

Sometimes instead of Clysters we give if they can swallow liquid things, in Inflammations of Cassia, Tamarinds, Manna dissolved in syrup of Roses, Violets and the like; as in Fevers. In other Defluxions stronger Remedies are given, as Hiera Picra commended in a Bastard Quinsie two scruples, in Pils, after a short Supper, they say it cured many of the Quinsie in *Rome* when it was deadly. Also a Decoction of a dram of Turbith with Liquorish, Manna, or Cassia is good if often given.

Prepare the humors with thickners if it be hot, as syrup of Violets, Poppies, an Emulsion of Cold seeds, Rose water, or Diacodium, and other things in a Catarrh.

Or if the Defluxion be cold give things to correct it, as syrup of Maidenhair, Bugloss, or Scabious water.

Or thus: Take *Liquoriſo an ounce, Maidenhair, Bugloss, each a handful; Violets & Scabious, each a pugil; Raysons stoned, Jujubes, Sebestens, each six pair, Barley a pugil, the four cold seeds, each a dram and an half*; boyl them, and in *a pint and an half* dissolve *simple Oxymel* and *Honey of Roses each an ounce and an half*; *Sugar an ounce*: make a *Julep* for three or four *Doses* with *a dram of Diatragacanth frigid.*

Also the Decoction and Water of Violets.

In a cold cause, give syrup of Hyssop, Horehound, and Liquorish, with Colts-foot and Horehound Water.

Or thus: Take *roots of Elicampane two drams, Liquoriſo six drams, Hyssop a handful, Figs ten, Dates five, Anise seeds two drams, Rosemary flowers a pugil*: boyl them, and in *a pint and an half* dissolve *Honey of Rosemary two ounces, Sugar an ounce and an half*; *Sugar candy an ounce*, make a *Julep* for some Doses with a dram of *species Diarodon.*

The Topicks for a true and false Quinsie.

To the place affected we apply Topicks inwardly and outwardly, inwardly Mouth-waters or things to lick, or Fumes, outwardly things to the Neck, as the part is affected.

In a Quinsie from what Defluxion soever, you must use Repellers at the beginning, while the matter flows, with Coolers if it be true; or without, if it be a false Quinsie, after a Defluxion add Concoctors and Resolvers, which we use alone at last. alwaies while there is pain and straitnes, give Lenitives to asswage pain and dilate the passages with other things, and things which clense and cut tough flegm which useth to stick there in a cold Defluxion. the examples are as followeth.

At the first give Repellers. the first Gargarism. Take *Rose, Plantane, Honey-suckle water, each four ounces*; add *Vinegar* or *Pomegranate Wine or the juyce of sour fruits, and two ounces of Diamoron or Honey of Roses.*

Another: Take *Plantane water four ounces, Rose water two ounces, Sugar of Roses or Honey of Roses an ounce, Allum a dram*: boyl them a little or dissolve.

A third: Take *Pomegranate peels, flowers of Pomegranates, Cypress nuts, each an ounce*; *and Teazle, Galls half an ounce, Lentiles, red Roses, each a pugil; Myrtle seeds half an ounce, Plantane seeds two drams*: boyl them in *Water* and *Honey* and in a pint dissolve *Diamoron, sour Pomegranate Wine four ounces*, add a little *Allum* to make it stronger, *Repelling Pouders* are blown in, as of *Plantane leaves* and *red Roses* and the like.

In progress of the Disease use Repellers and Dissolvers together: As, Take *water of Self-heal, Plantane, Willow, each three ounces, Cassia, Diamoron, each an ounce.*

Or: Take *Liquoriſo an ounce, Cypress roots, peels of Pomegranates, each half an ounce; Pomegranate leaves two*

drams, red Roſes a pugil, Figs ſix, Dates three, Raiſons twelve pair, Jujubes and Sebeſtens, each ſix pair; Barly a pugil, Fœnugreek and Lineſeed, each half an ounce: boyl them, and in a pint, diſſolve *Diamoron compounded with Saffron and Myrrh two ounces, Caſſia and Oxymel each an ounce.*

The juyce of Ivy drunk from three drams, to half an ounce, is good to repel and digeſt. This Plant is ſo powerful in Diſeaſes of the throat and Neck, that the Vulgar think Spoons made of Ivy do good.

At length uſe Reſolvers, and Concoctors and Clenſers.

Thus a Gargariſm. Take *water of Dwarf-Elder and Self-heal water, each an ounce; Hyſop and Roſe water, each two ounces.* Or this Decoction. Take *Liquoriſh an ounce, roots of Dwarf-Elder and Radiſh, and Orris, each half an ounce; red Roſes, Mallows, Chamœmel and Elder flowers, each a pugil; Hyſop half a handful, Radiſh ſeed two drams, Fœnugreek ſeed half an ounce, Figs ten, Dates five, Bran a pugil:* boyl and in ten ounces diſſolve *Sapa, Honey of Roſes, each an ounce and an half; Swallows neſt, two drams, Myrrh, Mummy, each a dram; Saffron, Sal Armoniack, each half an ounce.*

Or this: Take *ſpecies of Diairees a dram, Pepper half a dram, Saffron and Myrrh, each a ſcruple; Juyce of Liquoriſh a ſcruple, with ſyrup of Hyſop two ounces:* make a *Lenitive.*

Or thus: Take *Pepper half a dram, Saffron and Myrrh each half a ſcruple; Orris roots a dram, Honey three ounces,* mix them. Or uſe the Eclegma of *Scribonius Largus.*

A white Dogs-turd called *Album Grecum* finely pondered and blown into the Mouth, or mixt with theſe Eclegma's is excellent, or with ſyrups. A Gooſe-turd dried doth the ſame.

Alſo the pouder of ſalted and dried Swallows a dram, with convenient Water is good according to *Dioſcorides.*

Or a dram of the pouder of a Boars tuſk with Linſeed Oyl.

Or the Smoak of Amber taken in with a Funnel.

Or theſe Lenitives and Dilators when there is pain and ſtraitneſs.

As a Gargle of hot Milk, Goats is beſt.

Another. Take *Milk half a pint, the white of an Egg well beat, the mucilage of Fleabane, Quince or Line ſeed each an ounce, Penidies half an ounce.*

Bran or Bread boyled in Water and ſtrained or Almond milk doth the ſame.

The common white Troches are good alſo to be held under the Tongue.

Or: Take *ſpecies of Diapapaver or Diatragacanth frigid, each a ſcruple;* with *pulp of Tamarinds,* make *Troches.*

Or hold troches of Diapapaver or Diatragacanth frigid in the mouth.

Or this Eclegma. Take *ſpecies of Diatragacanth and Diapapaver each a dram;* with *ſyrup of Violets and Jujubes* make a *Lohoch.*

Lenitives that clenſe the ſlime are thus made. Take *Liquoriſh two ounces, pulp of Raiſons two drams, juyce of Liquoriſh half a dram,* with *Gum tragauth* infuſed in *Poppy water:* make a *Lohoch.*

Another in the progreſs of the Diſeaſe. Take *ſpecies Diapenid and Diairees, each a dram;* with *ſyrup of Hyſop* make a *Lohoch.*

Apply outwardly to the Neck or under the Chin, or where a tumor appears at the firſt, not things that repel, but that draw forth, as theſe relaxing.

As temperate Oyls, of Olives, ſweet Almonds, Violets: or moderate warm, as Oyl of Chamœmel, Lillies, Orris, Wall-flower, and the like: anoynt the parts and dip Wool therein and lay thereupon. *Dioſcorides* commends Oyl of Frogs, or of Wood-lice, or Sows.

Alſo Oyntment of Marſhmallows, and that which reſtoreth called Reſumptivum, with thoſe Oyls and a little Saffron.

Menſtrual Blood with Vinegar is good againſt all Inflammations of the Jaws and parts adjacent. Alſo the leaves of Horſ-radiſh.

Uſe Fomentations firſt before you anoynt, made of flowers of Chamœmel, Lillies, Melilot, Linſeed and Fœnugreek.

But when you deſire not only to draw out the humors, but alſo to dry, Conſume and Digeſt, uſe the following.

Make a Pultis of a Swallows Neſt clenſed and pondered, and boyled in Wine and Water, and ſtrain or mix the pouder with the Oyls and Oyntments mentioned. if you wil Digeſt, apply it with Honey.

Swallows dung in Pouder, or the Aſhes of it burnt, mixed with the reſt, or applied with Honey, or a dried Dogs-turd, or Birds dung, chiefly of Hens and Pigeons: For it is neither neceſſary nor decent to apply Mans dung when other wil ſerve.

Alſo uſe Sows or Wood-lice dried and poudered with Honey.

Other Digeſters. Take *Aloes two drams, Ox Gall a dram, Pepper half a dram, Allum a dram,* with *Honey* make a *Liniment.*

Another. Take *juyce of Danewort and wild Cowcumber, two ounces, Ox Gall half an ounce:* with *Honey* make an *Oyntment.*

Rhaſis uſeth Honey Anacardine.

Another. Take *juyce of Danewort two ounces, juyce of Onyons an ounce, juyce of wild Cowcumbers as much* (if it may be had) *Oyl of Flower-de-luce and Lillies, each an ounce and an half;* boyl them, add *Swallows neſt prepared half an ounce, Litharge a dram and an half:* with *Wax* make a *Liniment,* or with *Wax* and *Pitch* make a *Plaſter.*

Or this Cataplaſm. Take *Lillies and Onyons, of each three;* roaſt them, ad half as much of a *rotten Apple* and a handful of *Wormwood,* boyl them in *Wine* and *Water* beat them, and with *Bean flower two ounces, Oyl of Chamœmel and Wall-flower, each an ounce and an half; Hens or Pigeons dung two ounces,* make a *Cataplaſm.*

The Cure of an Impoſthume in the Quinſie.

If an Impoſthume come in a Quinſie, as we may know by the pain and other accidents increaſed, and the humor cannot be Digeſted or Reſolved by the Remedies internal or external mentioned, uſe Maturatives or Ripeners inwardly and outwardly.

Inwardly we ripen with this Gargle. Take *Lillies, Onyons, or Leeks, each two ounces; Liquoriſh an ounce, Hyſop, Scabious, each a handful; Figs ſix, Raiſons ſtoned an ounce, Fœnugreek and Linſeed, each half an ounce; Mallow and Colewort ſeed, and Swallows neſt, each two drams:* boyl them in *Water* and with *Honey* make a *Gargle.*

Outwardly ripen with theſe.

Apply a Pultis of Line-ſeed meal with Goats Milk.

Or thus: Take *meal of Fœnugreek and Line-ſeed, each two ounces; crums of Bread four ounces,* with *Hogs greaſe and Oyl of ſweet Almonds* make a *Pultis.*

Or this Cataplaſm. Take *Marſhmallow, Mallows roots and all, Henbit and Pillitory of the Wall, each a handful; green roots of Lillies two ounces, green Orris and Briony roots an ounce, Chamomel flowers and Violets, each a pugil; Figs twelve, Dates five:* boyl and ſtamp them, add

meal

meal of Line-seed, Fænugreek and Barley, each two ounces: with Butter and Hens grease, Oyl of sweet Almonds and Chamomil, mix them.

If the Impostham: in a Quinsie break not, you must endeavor to open it before it be perfectly ripe.

With this Gargle, hot used. Take *juyce of Onyons or Leeks and Lemons equal parts, with Goats milk.*

Or: Take *of the Gargle mentioned a pint*, add and boyl therein *Pellitory roots and Mustard seed, each two drams; Myrrhe half a dram, Saffron a scruple, Oxymel simple an ounce.*

This is stronger. Take *of that* Junket *that is made of Mustard and Honey*, dissolve it in *Honey* and *Water*, and with a little *Vinegar* make a *Gargle.*

Or; Take *Mustard seed two drams poudered, Oxymel an ounce, Vinegar of Squils and Wine, each half an ounce:* make a *Gargle.*

Vociferation or Roaring may do something to break it, but swallowiug may do more, if it be with great force, and of somthing that is hard as a crust of Bread.

Or: Take *a Spunge or a piece of salt Pork* and tied to a thred fast, let it be swallowed down and drawn forth again.

We open the Impostume if it can be seen and reached, with an Instrument, or with the Finger or Nayl, or a wax Candle, or other wooden or Iron Instrument that wil cut.

Remedies for the Tonsils or Palate inflamed, or for the Antiades or Uvula.

In the Inflammation of the tonsills and Uvula, we first use inward medicines as in the Quinzy, which are astringent, after resolvers, and at last things only to be swallowed: alwayes mixing things that clense by reason of the slime that sticketh there, and that mitigate pain if it be great, so that many medicines mentioned in the Quinzie are here good, and such as are mentioned in the Inflamations of the parts of the Mouth, or these.

An astringent and cooling Gargle, Take *Rose and Honey-suckle water, Privet and Plantane water, each two ounces; Juice of Barberyes, or Pomegranates, or sower Cherries three ounces, juice of Quinces, Roses or Sorrel, each an ounce; syrup of Mulberies, Vinegar of Roses or green Grapes half an ounce.* mix them.

An astringent and cooling Gargle Take *sower Prunes dry twelve, sharp Cherries twelve paire, dried Pears five, Sorrel, Purslain each an ounce, red Roses a pugil.* boyl them in a pint add *juice of Currans and syrup of Mulberies each two ounces, Vinegar of Roses as much as fit.*

When you wil bind more, Take *roots of Mulberries an ounce and half, Acorn cups, Pomegranate Peels, each an ounce; Bramble tops, Plantane, Agrimony, Solomons-seal Shepheards purse, Harts tongue, each a handful and half, red Roses a pugil, Pomegranate flowers half an ounce, Galls two drams,* make a *Decoction*, in a pint thereof dissolve *syrup of Quinces and red Roses dried, Pomgranate wine each an ounce and half, with a little Allum.* mix them.

Cardan comends this following remedy for al Inflamations of the Jaws, drines and Clefts of the tongue.

Take *a good quantity of Housleek, and to halfe a pint of the juice, add Salt Ammoniak two drams, put it in a moist place under the earth til the Salt be dissolved, then distil it in Balneo and wash the mouth in all Inflamations of the Jaws.*

In the Inflamation of the *Uvula*, a Pouder is made of the stone called *Ageratum* by *Galen* or the blood-stone, this must be laid upon the *Uvula*, or blown in with a quil.

When you wil astring and clense also: Take *Liquorish two ounces, Agrimony, Vervain, Coleworts each an handful; red Roses and Mallows, each a pugil; Barley, Lentils leaves bruised, each half a pugil: Figs six:* boyl them in *red Wine* and *Water*, and in a pint, dissolve *Oxymel simple three ounces, Diamoum half an ounce, juyce of Roses an ounce, syrup of Quinces an ounce.*

You may make Lohochs to clense mentioned in the Quinsie, and Sugar'd or Honeyed Biskets.

When you wil Clense and consume the residue, or Digest. Take *Liquorish two ounces, Calamus and Galangal half an ounce, Hyssop, Pennyroyal, Savory, each a handful; Rosemary flowers, Violets and Mallows, each a pugil; Barley a pugil, Raisons stoned two ounces, Dates six, Figs twelve, Myrrh and Frankincense, each two drams;* boyl them in *red Wine* with *steeled Water*, and in a pint, dissolve *Honey of Roses three ounces, syrup of Liquorish two ounces, syrup of Hyssop an ounce:* make a *Gargarism.*

A Digesting pouder in the increase of an Uvula inflamed. Take *Orris half a dram, Frankincense a dram, meal of Orobus half a dram, Saffron a scruple*: make a *Pouder.*

Topical Remedies for the Paristhmia or swelling of the Almonds.

In the Swelling of the Almonds from a flegmatick Defluxion, the former Remedies are good: but you must use less Coolers, and mix Clensers and Digesters.

Topical Remedies for the falling down of the Palate or Columella.

In the looseness of the Uvula from a cold Defluxion you must presently use Astringents and Dryers to make it shorter, and bind it that it may not fall down, as those mentioned or these following.

A Gargle. Take *roots of Celondine an ounce, Agrimony, Harts-tongue, Self-heal, Golden Rod, Privet, each a handful;* boyl them in *red Wine, red Roses and Barley, each a pugil; Galls half an ounce*, boyl them in *red Wine*, add a little *Vinegar*, and *syrup of Mulberries an ounce.*

Or: Take *Pomegranate peels two ounces, flowers of Pomegranates half an ounce, red Roses, Lentils, each a pugil; Myrtle seeds two drams*: boyl them as formerly, in the increase of the Infirmity, add a little *Pepper*, and *Pellitory roots*, and *Chamomel flowers.*

The Water of Phyllitis or Harts-tongue is a good Gargle.

Or Vinegar and Water.

Also juyce of Pomegranates and sour Grapes.

Troches to be held in the Mouth. Take *Acacia Hypocistis, each a dram and an half; the best Bole a dram Starch two drams, Snakeweed half a dram*, with *Gum Traganth* make *Troches.*

If you take fine pouder that is astringent in a little Spoon, or upon a Spatula, and depress the Tongue and touch the Uvula therewith, it wil presently be made shorter.

It is commonly made of Pepper, the long Pepper is best.

Or of Allum or Salt Armoniack burnt, or flour of Brass according to *Dioscorides.*

Or: Take *as much Salt as an Hazel Nut*, burn it in a *Iron spoon* til it be red, add *long Pepper a dram, Ginger a Pellitory, each half a dram*; make a *Pouder.*

Also burnt Snails shels, Dill roots and all, and Nut-shels burnt are good.

Or the Pouder of Sandarach.

Or: Take *Galls, or Pomegranate peels a dram, Bole, Mastick Myrrh, Acacia or Hypocistis, each half a dram; Pellitory and Pepper, each a scruple*: make a *Pouder.*

I have often found the Pouder of *Lapis prunelle* is a special Remedy against the falling of the Uvula, because it squeezeth forth the Humors that fils it.

As for the Cutting we have already spoken thereof.

It

If the Defluxion be only upon the Tonsils or Almonds or Palate, we apply outwardly first things under the lower Jaw, as relax not, as in the Quinsie: for there is not such danger, that we need draw at suddenly forth; but such as dry the humor and astringe or bind the part.

They are made of Consumers of the Humors and Digesters, with some Astringents mentioned in the Quinsie.

Or thus: Take *a Swallows nest prepared two ounces, dried white Dogs dung and Cypress Nuts, each an ounce; round Birthwort half an ounce, red Roses a dram,* with *Oxymel* apply them.

Or: Take *Swallow nest prepared an ounce, Litharge half an ounce, Aloes three drams, Allum two drams, Salt a dram,* with *Honey of Roses or Oxymel.*

In the increase of the Disease, use only Digesters or Emollients lest it turn to a Scirrhus, as in the Scrophulus, and if the tumor doth turn Scirrhus, then use things to be mentioned in Scrophulus.

If the Inflammation or Uvula turn to an Impost-hume of the Almonds, use Ripeners as in the Quinsie.

And open the Imopost-hume if ripe, which is easie, because you may come better at the part.

This may be done in the Uvula, and also before the suppuration to prevent it, by Scarification.

If the Uvula cannot be cured, but remains corrupt, and black, after the Inflammation, take off the corrupt part. Or if it remain longer or greater by reason of the Defluxion, take off the top of it, because it causeth impediment.

This is done best by a sharp pair of Sizers, this done stop the blood with cold and astringent Mouth-waters or Caustick, as we shal shew in Hæmorrhages or bleeding.

The same is done by an actual cautery, through an Iron quil, if you allay the pain after with Anodines, or Milk held in the mouth, but a potential cautery cannot be used so wel.

In the Inflamation of the Gullet, use Astringents at the first, then Digesters inwardly as we shewed, or these Lenitives.

Topical remedies in the Inflamation and Impost-hume of the Gullet.

Take *Cream of Barley, Mucilages, the white and yolk of Eggs,* and swallow them with *Sugar.*

Or Take *Sebestens twelve pair, Quince seeds half an ounce, Fleabane and Poppy seeds each two drams, Barley a pugil:* boyl them, and in the *Mucilage* dissolve *Penides.*

It is good also though the Gulet ly deep, to apply outwardly things, prescribed against Inflamation of the Jaws.

If there be an Impost-hume after Inflamation in the Gullet, and break not, things swallowed against the Quinzie are good, and the Impost-hume may be opened with an Instrument, such as we mentioned in the difficulty of swallowing, for drawing things out of the Gullet.

It is good in all Inflamations of the Jaws, and parts thereof, to put oyl of sweet Almonds hot into the ears.

Amulets are allowed as the head of a Viper hung about the neck.

Or if you strangle a Viper in a scarlet string, and after hang the string, about your neck, it wil do miracles, in this case, according to *Galen.*

Also hang *Peony* roots about the neck.

Or Colewort roots for the diseases of the Uvula.

As for other accidents especially in a Quinzie, we allow a slender Diet; And Drink to allay thirst, if they can swallow with *Barley, Raisons and Sugar.*

we allow but little Sleep, and let the Ayr be pure and cool.

For fear of Suffocation, let the Patient lye with his head high, and apply other things to the cause of the disease, to preserve strength, and to take away straitness of passage.

Topical remedies against an Ulcer after an Impost-hume, in a Quinsie.

If there be an Ulcer after an Impost-hume in the Quinzie, known by the matter voided, take heed least it get to the *Lungs,* and swallow it not but spit it out continualy.

Therefore clense the Ulcer diligently, with Gargles of Wine and Honey.

Or with *Milk,* or warm *Whey* and *Sugar.*

Or with *Barley, Lentile,* and *Figg water,* with *Honey* of *Roses.*

Then use driers as *Steeled Milk,* or *Milk* with *Comfrey* roots boyled in it, or mixed with *Bole,* or other things to be mentioned in ulcers of the Jawes.

If the Ulcer come outward it must be cured as other external Ulcers.

The Topical remedies for the Ulcers of the Almonds and Palate.

If there be an Ulcer left after Suppuration of an Inflamation of the Almonds and palat, or other external causes, presently apply topical means. But if it come from evil humors in other diseases, cure that disease first as shal be shewed.

As if it came from a Defluxion, first purge the body for that and make other diversions as in other Defluxions, as we shewed in other diseases of the Jaws from Defluxions.

With the aforesaid topical Clensers and Driers being strong, as we shewed in Ulcers of the mouth, we may cure these profound or deep Ulcers, or with these following proper for the Palate ulcerated or rotten.

As Goats milk, or Cows, or Sheeps milk, with Flints or Steel quenched therein, it will clense and heal the Ulcer.

Comfry, Agrimony, Plantane, Nightshade, and Endive water are excellent.

Also juyce of Agrimony, Coleworts, Vervain, Shepheards-purse and syrup of Mulberries.

Or the Decoction of Dogs-tongue, and Herb Robert Danewort, and Burnet.

To which Waters, Juyces, or Decoctions, add Sugar or Honey of Roses to clense more; and they will be stronger with Oxymel of Squils and Allum.

Also apply to the Uvula Honey of Roses and Allum.

Also to dry strongly. Take *fine Bole two drams, Dragons blood a dram, Cerusi, Tutty, each half a dram; burnt Harts-horn a scruple:* with *juyce of Shepheards-purse,* make a *Liniment.*

Or boyl Frankincense, Sarcocol, or Myrrh in Wine and wash.

Or use Allum water prescribed in Ulcers of the Mouth.

Or this: Take *Sugar half a pound, Allum two ounces, Salt an ounce:* distil a *Water.*

Or use Lime-water, that is Water with Lime quencht in it.

Or Sublimate Water to touch the Palate warily with them.

A Pou-

A Poulder. Take *quick Sulphur two drams, Allum a dram, Mastick, Frankincense, Myrrh, each half a dram; Pellitory roots, and burnt Harts-horn, each a scruple:* make a *fine Pouder*, to which add four ounces of sublimated *Wine*.

If the Ulcer in the Uvula cannot be cured, cut it off speedily before it eat off the Palate and other parts neer or burn it as we shewed.

Topical Remedies for the rawness or excoriation of the Gullet.

If the Ulcer or rawness of the Gullet come from a sharp Defluxion, or a hot Vapor ascending, these must be first turned away if they continue, the Flux must be stopped, and the Jaws lenified, and the sense of feeling a little abated. Or if it be wounded from sharp things that stil stick there, take them out by the Art explained in difficult swallowing.

Then Cure the Ulcer with Topicks choosing such in a simple excoriation which gently clense and dry and that may be swallowed down to the part affected without trouble.

Such as we shewed in Ulcers of the Jawes after a Quinsie, to Gargle with, which swallowed will cure a sore Throat.

If the Ulcer lie deep and be foul, you must use stronger Clensers and Driers: Also if it be wounded from things swallowed; use the Remedies prescribed in the Ulcers of the Tonsils and Palate made of fat Earths, Bole or Lemnos Earth, and drying fruits juyced, as Acacia, green Grapes, and Dragons blood. Or those that are made of Gums, as of Frankincense, &c. and other Astringents and Driers mentioned in the Inflammation of the Jaws.

Also use such Fumes as are in the Ulcers of the mouth mentioned to dry.

And the outward means mentioned in Quinsie.

CHAP. X.

Of the Griefs or Pain of the Breast.

The Kinds.

THe inward Greefs or Pains of the Breast, are either Molestations only in divers strait passages of the Breast following divers Diseases. Of these we spake in Breathing hindered, because the Breath is either hindered or depraved thereby.

A false Pleurisie.

Of true pains in the Breast, some are alone, others mixed. A Pain alone, is when without other great accidents, there is a pricking in either side, especially in breathing, in some certain place, or moving; hence comes the false Phrensie, but not a true, because there is neither Cough nor Fever, except there be some other accident. If this

A pricking pain.

pricking be great the breathing is little, and short, because if it be great, the pain is increased, and therefore the Party breaths gently. Of this there are two sorts differing in the Cause, the one is from Wind, the other from Flegm If they come outward with tumor and pain, they belong to external tumors to be mentioned in the habit of the body.

Of mixed pains, especially with a Cough or Fever, some are pricking, called true Pleurisies, and are sometimes in one side sometimes on the other, in a certain place, especially in breathing, which is also little and short, and very hot. This pain is greater when they lie upon the sound side, then when they lie upon the Back or the side affected.

A true Pleurisie.

Another pain in the Breast unaccompanied with the aforesaid accidents is great, contracting as it were the Breast and Back, and drawing aside the Clavicle, with greater straitness than the other, with pricking of the Breast sometimes before, or behind, or on both sides, this is called *Peripneumonia*, very like the Pleurisie in all things, but in respect of pain. And the liker if there be a pricking pain in the side, and then is a Pleurisie and *Peripneumonia* mixed together.

Peripneumonia.

There is a Cough in both kinds, more or less, which increaseth the pain, especially if it be pricking; by which at the first sooner or later, there is spit forth spittle mixed with matter or blood, sometimes which is rare, it is without, afterwards there is matter bloodish, and at length true matter white, or yellow, or green, or black, concocted or not, somtimes clammy, somtimes stinking, somtimes otherwise.

In both the Pleurisie and Peripneumonia there is a Fever with a pricking pain, and both Diseases begin with horror and chilness, and a Fever following, Respiration is increased and the pulse, and the Artery is hard and rough as a Saw when the pulse is touched, though some think that in Peripneumony the pulse is soft and wet. The Urin is high, and there is great thirst: and in a Peripneumony the Cheeks are very red, and the Fever continues so long, with exacerbations or fits in the night til the disease declineth or changeth, as we shewed in Fevers.

There are other symptoms in both, from Diseases of the parts adjacent, as Doting, Swouning, and the like, but then these Diseases are mixed with others.

A Pleurisie differing from the rest.

Besides these there is a pricking pain with burning in the side, with a Fever and Cough, like a Pleurisie, only in that there is no bloody or mattery spittle, but a foul and dry Cough, and in that the pain comes outward, and makes the Breast sore when it is touched, and somtimes there is tumor and redness. This being different from the other in respect of the part affected, as shal be shewed in the Causes, and we call it the Pleurisie of the Membrane.

The Causes.

The place affected.

These Diseases are in the inside of the Breast that cause these pains in the Pleurisie and Peripneumony, and are either distension or Inflammation.

The Distension of the Membrane that girts in the inward parts of the Breast, so great that the Membrane is lifted up and down as it were aside, if not torn or rent from the Ribs and Muscles, causeth that pricking pain in a false Phrensie. This may be from Wind or Humor.

Distension from Wind.

When Wind gets into the spaces, between the flesh and the membranes, it causeth the pain called windy. And in the Breast when it gets between the Intercostal or Muscles between the Ribs, it distendeth the Membrane

and causeth the pricking pain of the Windy Pleurisie.

This Wind as in other Diseases comes from eating of crude and windy things; and it wil be sooner in the Breast, if there be outward cold; or it is driven to the Breast by straining, roaring, coughing, or the like, when the Muscles are stretched: hence it is that we have seen that after the Breath hath been exposed to the Air, or after great motions there have been pricking pains sudddenly, especially in bodies subject to wind; and they have abated by heat and rest.

A Defluxion of Rheum is the cause of a false Pleurisie called Flegmatick.

A Water or flegmatick humor falling down into the spaces between the Muscles of the Breast, and stretching them with its plenty, as it causeth external pricking in the Breast (of which in external pains) so if it be caried to the inward Membrane which is easie if it be thin, causeth these inward pains, which are outward also, not only in the Breast, but Shoulders, and that false Pleurisie which they call flegmatick.

Besides which there is no other (as some hold) which causeth Inflammation and yet comes from flegm, for we shal shew that all Inflammations comes from blood.

Inflammation of the Lungs causeth a true Pleurisie and Peripneumony.

An Inflammation of the Lungs somtimes, and in the Membranes and parts adjacent together or asunder, as it is in this or that place causeth a true or false Peripneumony or Pleurisie, or that which is of the Membrane, either alone or mixed. how this is caused we shal declare.

The Inflammation of the Tunicle is the Cause of the girding Pluristie.

It is the vulgar opinion that the Inflammation of the girding Tunicle causeth a true Pluristie and of the Lungs a Peripneumony: But we wil prove not only from anotomies wherein we have seen the Lungs inflamed after a Pleurisie, but by solid reasons, that the Lungs are inflamed in a Pleurisie, as wel as in a Peripneumony. Because the blood which they so soon spit cannot be (especialy so quickly) carried through the Lungs and their vessels, from the Tunicle inflamed, not matter except the Lungs be ulcerated, but rather if it come from thence, it should flow into the cavity of the breast, and cause an *Empyema*. Therefore because Blood and Matter are quickly and plentifully set forth in a Pleurisie and Peripneumony, they must come from the Lungs, and from no other part, as also the other accidents in both diseases, shew that the Lungs must needs be afflicted. Only this is their argument, that the Lungs are not only inflamed in a Pleurisie, because the pricking pain which is manifest in the Pleurisie, is obscure in the Peripneumony or none, and cannot be from the Lungs affected, but in a sensible and membranous part, which the Lungs are not. But this is not enough, to evince that though these prickings come from the membrane, yet the Lungs are not inflamed in a Pleurisie, as wel as a Peripneumony: But this is all that wil follow, that if the Lungs are only inflamed (as the truth is) the peripneumony is in one side (because the Lungs are divided by the Mediastine or Midriffe) and rather inwardly then outwardly, when there is no pain. But if the Inflammation be in the outside of the Lungs, then the pricking pains are from the Tunicle, but gentle, because the Lungs are not altogether insensible. But if the Inflammation be extended outwatd so that the Lungs are stretched, especialy in breathing (at which time pain is only felt) and the Fibers and smal veins and Arteries by which they are joyned to the girding Membrane streined, they pul the Membrane from the breast, though there be no Inflammation, (as we shewed in wind,) and then the pain is in the side, and it is greater when the Membrane suffers by content from the Lungs inflamed by Swelling and Heat.

We deny not but it may be thus, and that the girding Tunicle may be also inflamed, and also the *Periostia* or bone Tunicles near it, (but we wil not acknowledg that it can be inflamed alone to cause any other kind of Pleurisie, as some write, because it sticks so close to the girding Membrane, where it is covered with Ribbs) which being so, there wil not be the true Pleurisie, which is without the Inflammation of the Lungs, which hath bloody and mattery Spittle, because the girding Membrane cannot be disburdned thereof: But there wil be that kind of Pluristie, which we called peculiarly the Pleurisie of the girding Membrane. In which if there be great Inflammation, there must be pain increased from the pressing the breast, and it wil extend it self outwarly, because the Inflammation cannot be conteined in the thin Membrane or *Periostia* but must reach to the muscles joyned thereunto, and so may be felt outwardly, because the Breast is not so thick, (as we have known in the Inflammation of the *Peritonæum*. And in this kind; If the Inflamation suppurate, the Impostlume wil rather be outwaad then inward, and there open: But if it break inwardly, the matter gets into the cavity of the Breast rather then into the Lungs, because it cannot be carried so quickly unto them and pierce through them.

But as these Arguments prove, that this may be so, so it is probable that if the girding Membrane be inflamed together with the Lungs, and from them that that Inflammation in the Membrane wil be discussed rather then suppurated, because the great quantity of Blood in the Lungs at that time, cannot easily be in so thin a Membrane, or if it could be, it would rather be carried outward, as we shewed, and fil those muscles, and there come to suppuration. And hence it is that after a true Pleurisie, though the girding Membrane be also inflamed and nothing appear outward, yet an *Empyema* seldome followeth.

And this is like to be also when the dividing or intercepting Membrane is inflamed with the Lungs, in which as being a different disease, especially when the Inflammation reacheth to the *Capsula* of the Heart and *Diaphragma*, there are grevious symptomes that seize upon the mind and endanger the life.

These Inflammations both in a Peripneumony and true Pleurisie, being in any part of the Lungs, or elsewhere, come from Blood, with which the Lungs abounding by reason of the many great vessels, and being hotter by reason of the Arteries and the nearness of the Heart, it is easily inflamed: And the Inflammations of the Lungs are more usual then of any other part. This Inflammation comes from Blood, (as others,) when it is got into the substance of the Lungs, out of its vessels which are the Arterial Veins, and Venal Arterie, and not into the branches of the rough Arterie, (for otherwise there would be a spitting of Blood) this Blood therefore fils the Lungs, and lifts them up, causeth Heavines and Compression and streightness of the Breast, and inflames the Heart more, that before commonly had a Feaver; And by the Cough which it causeth, when it is sent into the branches of the rough Arterie, it makes the Spittle sometimes mattery and after bloody, at length this Blood being ripened and concocted or suppurated, is coughed up,

till

til it be all spent: The substance of the Lungs being unhurt, for if they be ulcerated a *Phthisis* would follow. As we have seen often Blood alone and other humors turnd into Matter, the substance of the part not being suppurated or ulcerated, both in the eyes and other parts and in other Excretions made from the Lungs, by other means. Also it may chance that from Inflammation of the Lungs, the Blood may fall upon the near side upon the girding Membrane and inflame it, but not usualy, because the Vessels are smal and few, and the vein to which the fault is laid called *Azygos* is only on the right side, and the Pleurisie is often on the left; As from the Inflammation of the Lungs in a true Pleurisie when the sides are attracted and the girding Membrane pulled aside, there may be a pricking. Hence it is that Pleurisies are more usual then the peripneumonyes, because the inside only of the Lungs are not so often inflamed, as it is in a peripneumony, but the Inflammation reacheth outward to the side adjacent, in which the pricking is greater when they ly upon the sound side, and the Lungs hang down being Inflamed, and with their weight draw the girding Membrane, then there is more pain then when they ly on the sick side, and the pain is greater if the Membrane be Inflamed. Upon which if so much Blood fall, from other causes and inflame it, the Lungs being sound, there wil be another Pleurisie differing from the true as we shewed, in which there is no such Spittle.

All these accidents in the divers kinds of pleurisies, are also in a peripneumony, which sometimes begins of it self and sometimes followes a pleurisie when the Matter is gathered inwardly, and because the Heart is then more inflamed they cause a more sharp Feaver, by which the Blood being heated also in the superior parts of the Body, there is a redness in the Face and Cheeks. This is counted the peculiar signe of this disease, and it may be more observed to be in Peripneumony then Pleurisie, and because this disease is more usual in old people, if their Cheeks be red it is looked upon as a strange thing.

According to the variety of the Blood, these inflammations of the Lungs are divers, for if it be pure, such as is in the veinous Artery it wil be a simple *Phlegmon*, in which Spittle is mixed with pure Blood; If the Blood be too thin or hot, as in the arterial Vein, there wil be a *phlegmon* with *Erysepelas*, in which the Feaver is greater, as it is if the Blood cause an Inflammation, which is mixed with pure Choler, and then the Spittle is bloody and yellowish: Because this is usual, it caused some to write that Peripneumony comes from an *Erysipelas* of the Lungs. Also if melancholy be mixed with the Blood causing the *phlegmon*, there is blackness with the bloody Spittle. And if Choller joyned with Blood, be the cause of this Inflammation, then there is a Pleurisie, or tertian Feaver, as I have often observed. Oftentimes also without these Diseases, there is a discolouring of the Spittle, and it is not bloody, but yellowish, greenish, blackish, from cholerick humors; when the Blood is any otherwayes impure, and mixed with vitious humors it causeth an impure *phlegmon*. But if a *phlegmon* comes from a crude and wateriſh Blood, it wil be an *OEdema*, with gentler accidents, and the Spittle less discoloured; as in the Peripneumony, called therefore crude. Also from this diversity of Blood, If the Inflammation be in the girding Membrane, the Symptomes wil be greater or less.

Because no *phlegmon* comes from any other humor seperated from the Blood, we cannot make the Defluxion of Flegm, or other humor upon the Lungs, or the gathering of it there to be the cause of a true Pleurisie or Peripneumony, as some doe, and call it flegmatick for if these humors are in the lungs, they wil cause other Diseases that hinder breathing, as we shewed in defect of breathing, and if they fall upon the Muscles of the breast or upon the girding Membrane, they will cause a false Pleurisie as I shewed.

The cause of this flux of Blood that causeth a *phlegmon*, is often a Synoch Feaver which from the Blood inflamed in the Veins sendeth a portion into the substance of the Lungs, which produceth the Inflammation accompanied with a Synoch from whence it came: And therefore the same causes of a Synoch (as we shewed in Feavers) are the causes of these Inflammations. As Surfeiting, Drunkenness, because they cause Fulness and make the Blood too hot; are the causes of Synochs in young and old men, that live deliciously. therefore they are counted the cheif causes of peripneumony and pleurisie, and therefore they prescribed Abstinence from Wine and fat Flesh and Fish as Eels: from whence they say the peripneumony cometh, because the Blood groweth too fat, from eating of fat Meats and therefore may be sooner inflamed, except these fish have a peculiar force to inflame, as the Sea-Hare hath to ulcerate the Lungs. Hence it is that in Spring, and in the time when Synochs are rise, these Inflammations are most usual, in these ages especialy which are subject to a Synoch, not only with an outward *Erysipelas*, but that which produceth a peripneumony.

These Inflammations are sooner in the Lungs, then any other part, If with the causes of a Synoch, there be also a disposition in the Lungs to receive them, which disposition is the natural Heat and plenty of Blood, and thinness of Substance in the Lungs, as also a weakness acquired from a disease, which hath caused a Cough.

To which are added other causes which make them come out of the Vessels and flow to the Lungs, as a hot distemper, from Air, Anger or a hot Disease, as a Fever, or an outward Cold by Air which pierceth the Breast and Lungs: hence it is that this may be when the Veins are astringed. Also vehement motion, or pain about the Breast, or other things that draw blood to the breast. As in that Woman which conceived with Child in old age when her breasts that were formerly lank, grew great by the flowing of blood to them to breed milk, and fell into a Pleurisie. And I have observed that divers Women in the middle of their time of breeding, especially in the Spring after a cold Winter, from a sudden cold and moisture have falleni nto Pleurisies by reason of much blood flowing to the breasts to breed Milk.

These Causes, except there be a Synoch scarse produce an Inflammation alone, but rather a sperting of blood. Or if they produce an Inflammation in the Breast without a Synoch aforegoing there will be only a simple Pleurisie by reason of the Muscles affected from the girding Membrane. Or if the Lungs be also inflamed, in both, the Fever coming from thence will not be a Synoch which is the next cause of a pleurisie and peripneumony, and begins with these Inflammations or goes before them; but wil be symptomatical, as we shewed in Fevers.

The Cure.

The Cure varieth as the Disease is divers which produceth these pricking pains in the Breast. And it is either an Inflammation of the Lungs in a true Pleurisie and

and peripneumony, or of the Membrane in its pleurisie, or a distension from Wind or humor in the two kinds of false pleurisies called Flatulent and Flegmatick.

The Prognosticks of a true Pleurisie and Peripneumony.

The Inflammation of the Lungs both in a Pleurisie and Peripneumony is dangerous, but most in a peripneumony by reason of the nearness of the Heart, both cause Death, either in the fourth or fifth day, or in the fourteenth or twentieth. When it tends to health it passeth the second or third week, and first the pricking ceaseth, then the Fever, and last the Spitting of Matter, but if it continue above the time mentioned, and the Fever ceaseth not, but is lingring, it is to be feared that it wil turn to an *Empyema* or *phthisis*.

These following rules wil declare how these Diseases wil end. If from the Lungs inflamed they presently spit mixed matter, it is good, especially if they Cough and expel it easily; if otherwise, it is bad. This if it be blood or matter such as cometh from the part inflamed which is the Lungs, it is allowed. But if from the beginning the blood flows plentifully, for some daies, or cease and return again, it shews great hurt of the Lungs. But the sooner they spit matter white or concocted, and the more easily and plentifully it is voided, the better it is; unless it be sent forth in such abundance (as I have seen in a man that had a peripneumony and was ready to die) that it fill a Bason, this is a sign that the Inflammation is great and that a suppuration follows and also Death. Purulent matter though yellowish is not bad till it be Yellow, that which is green is worse, and black worst of all, that which is white, slimy, and cleer prolongs the Disease. That Inflammation that comes from pure blood, is more gentle, that which comes from cholerick or impure blood is worse and shorter; but that which comes from flegmatick blood is longer, but not so sharp. And that which follows other long and acute Diseases is harder to be cured. The peripneumony especially or the pleurisie in old people is deadly.

Great difficulcy of Breathing shews the greatness of the Inflammation, or a great collection of the matter; which suddenly flowing to the branches of the rough Artery, causeth more trouble, and they breath with snorting, and if they do not presently spet and hawk it forth, it strangleth.

Cold of the outward parts, the Face sunk, and the pulse little, foreshew Death as in other Diseases.

If the Fever be strong with Heat, Thirst, and Watching, the danger is more, if gentle, less.

If there be a *Delirium* or Doting, which useth not to be in these Diseases, nor from the Fever accompanying them, It is a mortal sign because it useth to come upon the distemper of the *Septum* or *Diaphragma*.

Bleeding at the Nose cannot be had in the beginning, both in respect of the Fever and also for Revulsion. But towards the end it weakneth, especially if much.

Plentiful voiding of Urin and Sweat, if they come seasonably, cures the Fever: and if they piss matter, they suppose the matter come from the Lungs, and the Diseases to be sent out of the way. But if matter can be carried from the Lungs by the hollow Vein which is more manifest rather than by the other obscure veins in the Breast which joyn to the Emulgent (which some men so diligently seek for, and bragg that they have found out) then in other Diseases there may be such a passage: but this is very rare, because in those that have been extreamly phthisical and empyematous no such thing hath been seen.

A Diarrhæa presageth Death, for, though some have thought otherwise, yet little of the cause of the Disease can be purged by stool. But if the Diarrhæa come at the first from other causes, and stay not long it may be harmless, especially if it take away any filth which may increase the Fever. And I have often seen Pleurisies after I have given Oyl of sweet Almonds with pouder of a Bores tooth, to go away with a plentiful Diarrhæa.

The Cure of a true Pleurisie and Peripneumony.

The Method of Cure for both is, to divert the Blood that flows to this noble part, & so to prepare that which is flown to the Lungs and inflames them, that it may be coughed and spet forth, because, except Nature do it of her self, it is in vain to purge it by Urin or Stool. Also still abate the pain in the Pleurisie which is very pricking, and in both cases inlarge the Breast, and hold up the strength, alwaies having an eye to to the Fever, as we shewed in Fevers; therefore abstain from hot things, and use temperate things that incline rather to cold; all which are done as followeth.

The Defluxion of Blood to the part is diverted best by Blood-letting, and the heat of the Fever abated, therefore neglect it not, though the Patient be very young, for we observe that in other cases and bleedings by cuts and falls they can loose much blood without danger: and in this Disease they wil find much ease by it: nor let it be omitted in women with Child, or old People: nor when the Disease comes from impure and cholerick blood, nor when the pain goes down to the Hypochondria. But for these causes do it moderately rather than omit it. Blood-letting must be suddenly while the matter is flowing, the first day, at what time of day or night soever it be: or if it hath been neglected do it the next or the third day, taking much at a time, or six ounces at a time, often, if the first bleeding do not abate the Disease, bleed then thrice a day, or two or three daies together: after the third or fourth day, except you fear the increase of the Disease, or a Relapse from a new Flux of Blood (for which cause after many daies if there be strength you may bleed again) you must not bleed rashly.

You must open a Vein in the Arm (because the Veins are larger and neerer the part) either the middle Vein or that which most appeareth which is alwaies best. And what vein soever in the Arm is opened whether it be on the right or left side the blood comes from the hollow Vein, from whose upper part above the heart the veins of the Arm come; and therfore by consequence blood is drawn from the right side of the Heart into which the hollow Vein is joyned before it ascendeth: and so also blood is drawn from the Lungs by the veiny Artery, by which the blood flows from the right side of the Heart to the Lungs. Except, because the hollow vein is more on the right side, and sends blood into the right side of the Heart, and only sends out the vein without equal, or not paired to the right side only, you desire to open the Vein in the right Arm for a directer way of bleeding. which some think to be necessary in a Peripneumony and Pleurisie. Yet in a Pleurisie it is thought better to open a vein on that side that is pained, than on the contrary side (as the Arabians do who first open the contrary Arm for Revulsion and then for Derivation) not only from the right order and direct flowing of the Vessels on that side, because the same may be good in a Pleurisie as wel as a Peripneumony, the Lungs being (as I shewed) affected in both: but because in a Pleurisie, the veins on that side where the pain is are more swollen with

blood.

blood. Therefore if the pain be on the right side, open the Vein in the right Arm, if on the left, open the vein in the left Arm by reason of the Defluxion of blood caused through pain. And if the Vein in the Arm appear not, open that in the Hand on the same side: by which if the blood come freely there will be a greater Revulsion, and if not, a less. Also it is good to bleed in the Foot, or by the Fingers, after bleeding in the Arm, especially in Women who have this disease from stopping of the terms.

Cupping-glasses to the Shoulders, Emunctuaries, and Groyns make Revulsion, and the more if there be Scarification: these help the other bleeding, or supply when the other cannot be.

Also Frictions and Ligatures of the outward parts cause Diversion: or a Decoction to wash and rub the Hands and Feet, but it must be such as doth not heat.

Some adventure to use a Caustick to the sids, but it is neither safe nor profitable, nor Cupping-glasses to the Breast.

Clysters are given to loosen the Belly before bleeding, if it be bound, they are to be cooling and gentle, such as are mentioned in Fevers, and other internal Inflammations and Quinsie. And some advise clensing Clysters at the end of the Disease if the matter tend from the Breast to the Guts, lest it should hurt them, which they think to be possible.

Loosners are better than purgers, for it is not convenient in Inflammations of the Breast to give purgers: both because the matter cannot be purged by stool from thence, as also because they heat the body, and cause a Diarrhæa which useth easily to come with much hurt to the patient. These Laxatives must be good for the Breast, whereof Manna is the chief.

Next syrup of Violets three ounces, or Cassia, or simple Diaprunes two ounces, alone or with pectoral Decoction.

Or thus. Take *sweet prunes, Raisons stoned, each an ounce; Violets a pugil,* boyl and dissolve *Cassia half an ounce, Manna an ounce:* make a *potion.*

After the seventh day the Ancients used stronger purges, the humor being first prepared: but these are best in a false pleurisie as I shewed: or if the true pleurisie ceaseth, they are good against accidents that remain, otherwise they hurt more.

We give to drink things that cause easie Coughing and Spitting, because the Humor being fastned to the Lungs and not to the Membranes, girding them cannot be sent a better way. This is done by Lenitives to the parts, and such as first thicken the Matter to stop the Flux of Blood if it be thin, and to make it more fit to be spit forth, and then by Concoctors, Clensers and Cutters, if it betoo thick and slimy. Or by things to ripen and cause matter to be spet forth lest it lying long there, the Lungs be corrupted by it, and a *phthisis* caused. Or if Nature endeavors to throw it out by stool or Urin (which is rare, and perhaps a meer Fansie) by such things as help Nature therein. These are done as followeth.

Lohochs to be swallowed by degrees, and so communicate their Vertue better to the Lungs are the best.

As the usual tablets of Diatragacanth frigid and Diapenidies without the species, held in the Mouth.

Or a Lohoch made of them with syrup of Jujubes or Violets to be licked.

Or this: Take *the species of Diatragacanth frigid two drams, Penidies a dram,* with the *Syrup* aforsaid make a *Lohoch,* adding half an ounce of the *Diacodium* if the *Cough* be great. others add *Conserve of Violets,* but it is not so good to be licked.

Or this: Take *Penidies an ounce, Pinenuts and sweet Almonds blanched, each two drams; the great cold seeds and white Poppy seed, each a dram; Starch half an ounce; juyce of Liquorish a dram, Gum Traganth and Arabick, each a dram;* infused in *Violet water* while they swell, *pulp of Raisons half an ounce,* mix them for a *Lohoch* with *syrup of Poppies, or a Diacodium half an ounce, and Mallow and Cotton seeds a dram.*

In the progress of the Disease when the Fever declineth, give tablets of Diatreos simple, Diapenids without the species, Lohoch of Pine.

Or thus: Take *Lohoch de pino half an ounce, species of Diatragacanth a dram, species of Diatreos half a dram, penidies half an ounce,* with *syrup of Maidenhair and Liquorish* make a *Lohoch.*

Or thus: Take *Sugar-candy, penidies, each half an ounce; pine-nuts two drams, of great cold seeds, each a dram; Orris roots two scruples, Gum traganth infused in water of Maidenhair and mucilage of Quince seed half a dram, pulp of Figs or Dates, each half an ounce; juyce of Liquorish a dram, or roots of Bryony and Nettle seed, each half a dram;* with *syrup of Hyssop,* make a *Lohoch.*

We use also stronger Expectoratives and cutting Medicines when they spet matter, especially if it be crude and slymy, and when the Fever is gone, and yet matter is voided. As *Lohoch of Coltsfoot, of Horehound, Lochsanum,* and other other medicines used in other diseases of the Lungs from *Flegm* and *Matter.*

Lohochs are made of fat things thus, to open the Breast, to mollifie and help spetting, as of *Butter, Sugar, or Sugar candy, or Sugar of Violets,* used like a *Lohoch,* the German May Butter called *Mehemuf.*

The new drawn Oyl of sweet Almonds or Linseed are good with Sugar to be licked and taken by degrees, or to be drunk in Broath, or any Decoction proper to allay the pains of the pleurisie to which some add *juyce of Marshmallows. Oyl of Nuts* also in the progress of the Disease concocts the matter and makes it fit to be expelled.

Of which make this Lohoch. Take *Oyl of sweet Almonds or Line seeds, or both Oxymel simple of Squils* (if the matter be tough) *each half an ounce;* with *Sugar candy* make a *Lohoch.*

Also Decoctions though they stay not long in the passage are good in respect of the Fever and Inflammation; give a draught once or twice a day, thus.

If you wil thicken and lenifie use Barley water which allaies thirst, and nourisheth if you increase the quantity of Barley. If you wil clense more make it of whole Barley, with Raisons, Liquorish, and other sweet things as Sugar or syrup of Violets, Jujubes, and Maidenhair.

At first if you wil thicken and expectorate. Take *roots of Marshmallows an ounce, Violets and Bugloss flowers, each a pugil; Jujubes and Sebestens, each six pair; Barley half a pugil, the four great cold seeds, each two drams:* make a *Decoction* to a pint, sweeten it with *syrups* or *Sugar-penidies.*

The Decoction of Corn-poppy made with Barley-water or Jujubes adding Sugar is good at first to stop a Defluxion and Inflammation: give three ounces at a time often, after boyl them in Scabious and Burnet-water to Concoct, or use the water of poppy instead of the Decoction, or give the dried flowers in powder with Broath or Violet-water, or other Liquor. Neither ought we fear its coldness, because the force it hath to attenuate and digest, which *Galen* imputes to the sharpness doth shew otherwise, as in the other Narcoticks which we shewed in other places are not cold.

When we wil clense more, give Sugar and Water

boyled twenty parts water and half a part Sugar, and if you cleanſe more yet, uſe more Sugar and a little Cinnamon.

Another to cleanſe and lenifie. Take *Liquoriſh an ounce and an half, Violets, Bugloſs flowers, each a pugil; Figs ſix pair, Raiſons ten pair, Jujubes ſix pair, ſweet prunes five, Barley half a pugil, Gourd and Melon ſeeds, each two drams*: boyl them, add *Sugar* or *Syrups*.

When we wil concoct and prepare thick matter at the end, give boyled Honey with Wine, it is good in old people, or when the Diſeaſe is not very hot. Or Honey and Water, which may be made as ſtrong and hot as Sack.

Alſo the Decoction of Carduus or Leucacanth, or white-thorn roots, or Anthemis flowers.

Another to concoct and prepare. Take *Liquoriſh an ounce, Elicampane root two drams, Maidenhair a handful, Hyſop and Goats Organ* (eſpecially in a pleuriſie) *each half a handful: Violets, Bugloſs flowers, each a handful; flowers of Anthemis half a handful, Raiſons twelve pair, Figs ten, Dates five, Melon or Gourd ſeeds three drams, Cotton ſeeds, Mallow and Fenugreek ſeed, each two drams; Aniſe ſeeds a dram*: boyl them, and add *Sugar, Honey or Syrups*.

Syrups to thicken are of Violets and Jujubes, to cleanſe, of Liquoriſh, and to concoct withall, of Maidenhair and Oxymel if the matter be tough, two ounces at a time may be given in a Decoction or Water of Violets, Bugloſs, Maidenhair, Scabious, Hyſop, like Juleps, or give julep of Violets, or the Syrups alone to be licked.

Alſo Spinage, Carduus, or Milk-thiſtle water, or of Anthemis flowers, or wild Lentils in a peripneumony.

Or water of ground Ivy four ounces in a pleuriſie four times a day, it is good to purge the breaſt from matter, and to defend from Peripneumony or Phthiſis.

Or the following potions. Take *Bores tusk or jaw of a Pike, Crabs Eyes, Bulls pizle, in pouder, a dram or a dram and an half, with Broath or Wine, or Carduus water, or Violet or Barley water*, theſe are better known by good experience than by reaſon.

The tusk of a Bore poudered and given with Oyl of ſweet Almonds or Line ſeed is an excellent medicine in pleuriſie or Quinzy.

Or *Lapis prunelle* given with Purſlane water, or of Bramble berries, or of Sorrel, with Coolers in a good quantity often, quickly makes men in pleuriſies to ſpit eaſily.

The Vulgar give the water wherein a Butchers Knife hath been laid ſome hours to cure the Pleuriſie.

The *roots of Daffodil or flowers, or of Dog-ſtones, Dockes, Goulden-hair, Lungwort*, In Peripneumony, *and ſeeds of wild Parſnepps and Carduus, pouder of Almonds or Nutſhells, each, a dram, or a dram and an half, with the Liquors mentioned:* are alſo good.

Alſo *roots of Centaury, the great Birthwort, and Coſtus agallochus, AEthiopis, and three leaved Daffadill leavs and ſeeds, Myrrh, Bdellium, Aſſa fœtida*, are comended by *Diaſcorides with wine and water*. But he ſaith not in what kind of Pleuriſie true or falſe.

It is known by experience, that theſe following are good and preſently abate, or take away the pain in a pleuriſie: Take *a ſcruple of Bores Tuſk, or a dram, with two or three or four ounces of Oyl of ſweet Almonds, or with Lineſeed Oyl*, as in a Quinſie.

Another experiment: Take *Nut-ſhels, red Corral, each a dram*, make a pouder, give it with *white Wine*.

This is highly approved, Take *Roots of long Birthwort, Piony, Bay-berries, each halfe a dram; Stones of Medlars, a dram; Ivory ſhavings, Myrrh, each dalf a dram*; make a pouder, give it with *Tamarick water, or Wine*.

Yarrow alſo bruiſed and given in *Vinegar*.

Alſo *Turpentine* any wayes taken alone, or with the *Yoalk* of an *Egge*, and *Violet water*, or the like, or in pills with *Sugar*, and *pouder of Liquoriſh*.

They ſay that pills made of melted *Pitch* open an Impoſthume, and alſo *Watercreſſes* and *Muſtard ſeed*.

The Chymiſts give flower of *Brimſtone* alone, or with *Salt peter*, and *Salt* of *polypody*, or *St Johns-wort* with *Wine*.

Inſtead of ordinaty Beer and Wine and Water to quench Thirſt, give Barley water, a little warmed as all Drink muſt be leaſt Spitting be hindred, and the Breaſt hurt. We allow Wine to refreſh the weak, but not afore the ſeventh day, a little and mixed with Barley water, and Sugar to cleanſe.

Give a thin Diet for two or four dayes, and ſuch as helps expectoration. as Cream of Barley, and of Almonds, thicker or thinner as you pleaſe; or ſweet prunes or Raiſons ſtewed with Sugar.

After uſe a fuller Diet, eſpecially after the ſeventh day, or ſooner if ſtrength fail, as boyled bread, or Marſhpane, or that of Almonds or pine nuts, and good Broaths and Jellies, as in the Hectick Feavor.

Or this. Take *the Brawn of an old Cock or Hen*, boyl it adding *Violet or Bugloſs water, or Scabious water, each two ounces*; give the Broath with freſh *Butter*, and a little *Salt*, and it is ſtronger if you bruiſe the Fleſh and and ſtrain it with the Broath.

Or add to that Decoction *three ounces of Crums of Bread*, and to a pint of the Broath add Conſerve of *Violets, Bugloſs, Maidenhair, to each an ounce, ſpecies of Diatragacanth frigid and Diapenidies, each a dram: Diamargariton frigid, half a dram; of the four great could ſeeds Cotton and Mallow ſeeds, each a dram; penidies two ounces*, diſtil a Liquor, it wil reſtore.

To nouriſh more; Take a *Capon prepared, and a peice of Veal*, boyl them to a Jelly, give it alone, or with the former *Liquoris*. or give the juyce of a roaſted *Capon* ſtrained.

Alſo give according to *Mathiolus, Snails* in *Barley water*.

Alſo take of the top of a ſweet *Apple* and hollow it, and fil it with *Olibanum* poudered, lay on the head again to cover it, and tye it together and roaſt it, give it to be eaten, this is thought good to cure and prevent a Pleuriſie.

Or give an *Apple* roaſted the ſame way, with Juyce of *Liquoriſh, Sugar*, and *Starch*.

Some give Diureticks at the end of the Diſeaſe, when Nature diſchargeth it by Urine to help her.

Alſo the Decoction of Fennel, Sparagus, Kneeholm, Liquoriſh, red peaſe, Maidenhair, and the great cold ſeeeds. Such as we ſhewed in Fevers when we deſire to carry away the matter by Urin.

Somtimes we give things to purge when Nature is willing that way to diſcharge the matter (which is rare) as we ſaid of Clyſters which open and cleanſe.

Alſo it is good to apply things outwardly to the Breaſt, whether the pain be great as in a pleuriſie, or little as in a peripneumony (although the Diſeaſe be not in the Breaſt, but in the Lungs properly) becauſe the ſtrength of theſe Remedies may reach thither.

Not-

Notwitstanding we must not at the beginning, give hot things to try if the Pleurisie be true or false, for they wil inflame and make it worse, for a true Pleurisie is discerned from a false by other waies which are more safe. Nor must we use all those things which are commended against Inflammations which they thought was in the girding Membrane, not in the Lungs, or especially against the Imposthume which they thought was there also, and therefore they apply things outwardly to suppurate and open: except the Inflammation of the girding Membrane follow the Inflammation of the Lungs, or come of it self without them as we shal shew in the pleurisie of the Membrane. But we must apply outwardly to the part pained, things that mitigate it, and dilate or open the Breast that they may spit more freely, and such as digest the matter in the Lungs. This is done by Anodynes that are temperate, and but very little hot and loosning: or if there be no pain, as in a peripneumony, you may use cooling things also against the Inflammation, and after such as ripen and dissolve it. All these must be applied actually hot.

A Fomentation is chiefly good when there is pain, and if it be only of warm water in a bladder, it wil mitigate and relax.

But more if these following be boyled therein: As, Take *Mallows and Marsh-mallows with the roots, Pellitory of the Wall, each a handful*; *Violets, Chamæmel, Melilot flowers, each a pugil*; *Lineseed an ounce, Bran a pugil, Figs ten pair, Annise seeds two drams*, boyl them for a *Fomentation*.

You may add *Branck-ursine and Colewort, each a handful*; *Fœnugreek seed half an ounce, Mallow seed two drams*, and in the progress if heat be not violent *white Lilly roots an ounce and an half*, and a little *Wine* to make it pierce. When the pain is violent the *Leaves, Heads, or Seeds of Poppies* allay it.

Also a *Bag of Bran* boyled, strained, and applied abateth the pain. To which you may add the things aforementioned.

Also there are Anodynes and ripening Cataplasms made of the residence of the Decoction mentioned beaten with *Barley meal*, with *Hogs grease* and *fresh Butter, each an ounce*; *Oyl of Violets two ounces, Oyl of sweet Almonds, Chamæmel or Dill each an ounce*.

Or: Take *Barley meal four ounces, Line seed and Fœnugreek, each two ounces*; *Ashes of green Coleworts two drams, Sagapen a dram*, with *Hogs* and *Goose grease*, make a *Cataplasm*.

Pellitory of the wall also beaten and fried with *Oyl* or *Butter* is excellent.

Or *Snails* boyled and bruised.

An Epithem of lenifying and cooling things may be applied to the breast, but hot, though there be no pain as in peripneumony.

Thus: Take *a Decoction of Barley a pugil, Gourd and Lineseed, each an ounce*; *Violets a pugil*, or you may use any *Epithem* mentioned in the *Hectick*.

In the beginning anoynt the side with Coolers and Loosners: As, Take *Oyl of Violets and sweet Almonds, each an ounce*; *fresh Butter half an ounce, Mucilage of Quince or Line seeds six drams*, with a little *Wax*.

You may add *Oyl of Gourd and Line seed*.

When the pain is great in a pleurisie. Take *Oyl of sweet Almonds, Chamæmel, Melilot or Dill each an ounce*; *Duck or Goose, Hens or Capons grease, each half an ounce*; *mucilage of Fœnugreek and Lineseed, each six drams*; *Galbanum, Turpentine, each a dram*; *Saffron a scruple*, with *Wax* make a *Liniment*.

The fat Caule of a Beasts Belly laid hot to the side taketh away pain.

Also *Unguents* and *Cataplasms* as the Resumptive Oyntment, made of Fats, the Pectoral that of *Marsh-mallows*, or that of *Zacharies* son, or of *Mesue*.

It is good after anoynting to apply a Colewort leaf warm or anoynted.

Or to sprinkle the Ashes of burnt Coleworts upon the part anoynted.

It is counted also a singular Remedy against a Pleurisie, to anoynt with Oyntment of Marsh-mallows, and to sprinkle pouder of Cumminseeds thereupon, or of Orris roots.

Let the patient ly upon the side pained, for so the pain wil be less, with his Head and Breast a little high, that he may breath somewhat easier: And let him beware of all violent motions of Mind or Body.

For other Symptomes if there be watching, or want of Sleep, give things proper for Disease also, as Almond Milk, with Emulsions of cold seeds and Saffron, or mixing Syrup of Poppyes, or the like, as we shewed in Watching.

If there be a Diarrhæa, because it is dangerous you must use Syrup of Myrtles, with other Medicines, because it both expectorateth, and stoppeth a Loosness, And anoynt the Belly and Reins, with binders, as we shewed in too much going to stool.

The Cure of a Pleurisie, or Peripneumony, and the Pleurisie of the girding Membrane when they meet together.

If there be an Inflammation in the girding Tunicle, (which then extends it self to the inward Muscles of the Breast, we distinguish it from the true Pleurisie, mentioned by the name of a Pleurisie of the girding Tunicle) and if it be with the Lungs also inflamed: Then we use the same way of Cure, as of a true pleurisie, being they are both together, and by reason of this Inflammation joyned, we use such Topical external medicines as are proper to the Inflammation, when alone.

The Cure of the Pleurisie, which is only in the girding Membrane.

But if the side be only inwardly inflamed and not the Lungs, then we use revellers, and derivers, by bleeding, cupping, and scarrifying, and the like, as in a true Pleurisie, and Clysters, and Laxatives.

For the things given to expectorate in the Inflammation of the Lungs, when the Inflammation is in the girding Membrane, cannot reach the part affected, nor can the matter from thence come to the Mouth, to be spet forth as I shewed; therefore they will do more hurt then good by causing a Cough, and moving the pained Side, therefore let no things be given to cause Spitting, except other Accidents happen, but such things as help in a true Pleurisie, by a propriety, and such as are mentioned there against Thirst, and for Nourishment.

But the Topicks which we declared in a true pleurisie, are good here, because they asswage pain, loosen the breast, and concoct the Matter there fastned, and the rather because being applyed outwardly to the pained side, they come near the part, and sooner and more directly spend their Virtue, then they can to the Lungs; therefore Fomentations, Cataplasms, Oyntments, and plasters, there mentioned may be applyed here, especially because by relaxing they draw the Matter outward, as I shewed in a Quinzy, and if the Inflammation be not great, and without a Tumor, they discusse and dissolve it.

And as they are used in a Quinsie, to draw Matter, from the streightness of the Jaws, so here to draw it from the breast, least it imposthumate there, & leave after

ter it is broken, an *Empyema* behind it. Therefore in both cases, we abstain from the beginning from all repellers, not because these hinder breathing, by astringing or binding the breast, as the Vulgar Opinion, which cannot be great, and if there were an Inflammation only outward, this could not hinder the use of them: but for the Cause mentioned that we may draw out the Matter, rather then strike it in by Repellers. Also we somtimes apply Cupping-Glasses to the breast, and other things that draw from within deeply, as Pitch malaxed with hot Oyl, with Rosin and a little Brimstone, or with black Soap dissolved with Oyls, these both resolve and concoct the matter attracted, and presently after we use Relaxers or Loosners. If the Inflammation will not cease by so doing, about the end of the Disease, we apply hotter Remedies to discuss the matter, that it suppurate not. Or if this cannot be done thereby but it doth Imposthumate, we apply to the breast outwardly things that ripen it, and that it may open rather outwardly than inwardly, as a tumor enlarged useth to do, otherwise than we do in a true Pleurisie.

In the progress of an internal Inflammation of the breast after we have used the Anodynes and Loosners mentioned in a pleurisie, and when the pain begins to cease, but is not quite gone, we use these following to draw out and discuss the Reliques of the Inflammation.

We foment the pained side thus: Take *Lilly roots four ounces, Mallows, Orris roots green, two ounces, Mallows, Horehound, Calaminta, each a handful; Chamæmel and Elder flowers, each a pugil: Rosemary flowers half a pugil, Fenugreek or Line seed six drams, Carua and Cummin seed, each a dram and an half; Figs six pair,* boyl them in *Wine* and *Water*.

Make a *Cataplasm* of the Residents of the Decoction beate with *Bean flower two ounces, Ashes of burnt Colewerts two drams, Oyl of Lillies two ounces, Honey an ounce,* with an ounce and an half of *Doves dung* it will draw more.

Or anoynt the side with *Oyl of Lillies, Flower-de-luce* or *Wall-flower*.

Or dip Wool therein and apply it, or a Cabbage leaf to draw: for which purpose they use only a Clout dipt in Sulphur.

Or this Oyntment which discusseth very wel. Take *Oyl of Lillies two ounces, Oyl of Orris and Dill, each an ounce; juyce of Dwarf-Elder or Onyons an ounce and an half, Aqua vitæ two drams,* boyl them till the *Waters* are consumed, add *Flower-de-luce root a dram and an half, Cummin seed a dram, Saffron half a scruple, Galbanum and Sagapenum dissolved in Aqua vitæ, each a dram; Turpentine two drams, Hogs grease and* Oesipus *or grease of wool, each half an ounce;* with *Wax* make an *Oinument*. *Goats* or *Pigeons dung* and *Brimstone, each a dram,* will make it stronger.

If you anoynt with *Oyntment of Marsh-mallows,* and sprinkle *Cummin seed* upon the part, it is as good here as in a true Pleurisie.

Also the *Plaster of Diachylon* with *Orris*.

But if after the use of Anodynes the pain abate not but rather increase, especially if the pain increase by being touched, and if a Tumor appear outwardly, then because it tends to suppuration, apply things that may help it forward, such as were mentioned for the Quinsie to be applied outwardly, or these.

A Fomentation: Take *Marsh-mallow roots three ounces, Roots of Lillies an ounce, Mallows, Scabious, Glasweed, each a handful; Flowers of Melilot and Dill, each a pugil; Figs six pair, Line seed an ounce,* boyl them in *Water* and *Milk*.

Beat the Residents, *and with Flower of Line seed, Mucilage of Quinces, and Marsh-mallow roots, each an ounce; Butter two ounces,* make a Cataplasm.

This ripens better and opens the Imposthume. Take *Onions and Lillies,* roast and stamp them, add *six ounces of Marsh-mallow roots bruised an ounce, Pease flower two ounces, Barley-leaven, or of French Wheat called* Spelt *an ounce and half, Pulp of Figgs an ounce, with Butter and Hogs grease* make a Cataplasm, if you add *Goat or Pigeons dung an ounce, and Mustard and Water-cress-seeds, each a dram;* it will sooner open it.

It may be broken by violent Motion of the breast, as Roaring, Neesing, Vomiting, but not so safely.

The cure of a false pleurisie of wind and water.

If in a watery or windy pleurisie there be a stretching in the Membranes, from a Humor or Water gotten thither, which causeth pricking, you must use things that stop the Humor, and turn it from the breast if it still flow, or if it be wind, give things that hinder the breeding of it, and keep it from the part. And in both cases apply to the part things that discuss, and digest, and consume Wind and Water.

Diversions are made by cupping, Friction, and washing, and other things that stop Defluxions and carry wind other wayes: but you must not open a Vein but when by reason of great pain you fear Inflammation, and only in plethorick bodies.

Sharp Clysters revel also, with things to expel Wind, in which *Hiera* dissolved is highly commended.

And purges with preparatives first, not only gentle to revell, but strong to draw down and send forth wind and humors that produce it: these are better here than in a pleurisie from Inflammation (which some do use in the pleurisie called *Flegmatick* which they dream comes from an Inflammation) Therefore we rather use *Rhubarb, Agarick or Scammony, or Coloquintida or Hellebore* as the Ancients, especially *Hiera of Coloquintida* commended so by *Galen* against a pleurisie, here then in an Inflammation in which we can give no strong Purges profitable, but with great hurt.

These Purges are mentioned in Diseases from Defluxions, here and there, and in palpitation from wind and in Rheums falling upon the breast.

And there you may find Altering Remedies also.

It is in vain here to give expectorating medicines as in a true pleurisie, except a Defluxion fall upon the Lungs. But some things there mentioned which work by a hidden quality or by drying or digesting may be given here.

As the *Carduus waters* (which some think cures pricking pains because of the prickles) as that of the *Blessed Thistle* called religiously the *Carduus of Mary*, or their seeds, or an Emulsion made of them and of *Hemp-seed*.

The Vulgar Women keep a water for this made of Ice gathered in *March*.

There are also other Remedies that cure a pleurisie without causing Coughing, as that of a Bores tusk, and the like, which are good here. and many better for a false than a true pleurisie, for divers of them are hot and dry which cannot be good in Inflammations, but by a hidden quality, and those may work in this Disease by a manifest as wel as a secret vertue. Especially those there mentioned of *Dioscorides* for pleurisies in general.

Also *Oyl of sweet Almonds and Line seed* given to dilate the breast, are good here taken in good quantities.

And *Wine* if nothing else forbid it, and other Meats and Drinks mentioned in Defluxion and Diseases of wind.

Apply

Apply outwardly things to diſſolve and diſcuſs wind and humors, and to take away pain.

As a great Cupping-glaſs to the part, with fire, which will draw out the Humor and Wind, by an attractive Vertue, not by Heat, (as ſome think) for Heat is not uſed to warm the breaſt, but to make the Glaſs ſtick.

Alſo actual Heat doth the ſame, if it be gentle, it qualifyeth the pain, if ſtrong, it diſcuſſeth and conſumes thin Humors and Wind, as the Heat of the Sun doth the Clouds. This may be done by any warm Cloths, or with warm Water, in a bladder or braſs veſſels, to keep the heat longer, made on purpoſe; Olive Oyl in a bladder hot, take away pain, But in a true Pleuriſie it muſt be but luke-warm.

Alſo Fomentations of things actually and potentially hot, with a Spunge felt, or Wool, ſqueez'd a little that it may not wet too much, or in a bladder rather then in braſs, that the vertue may pierce ſooner, and changed when cold.

They are made of Decoctions mentioned in Inflamation of the Membrane.

Or thus: Take *Marſh-mallow roots an ounce, Orris, Galangal, each half an ounce; Calaminta, Wormwood, Organ, Thyme, each a handful; Chamomil, Melilot, Roſemary and Stœchas flowers, each a pugil; Caraway, Cummin, and Fennel-ſeed, each half an ounce; Fenugreek and Linſeed an ounce, Bay-berries an ounce and half*, bruiſe and boyl them in *Wine and Water*.

This is an excellent Experiment in all ſide-pains.

Take *Spirits of Wine ſix ounces, Camphire a dram*, boyl them till the *Camphire* is diſſolved, add where it is hot *Powders of ſweet Sanders a dram and half*: wet Clouts, therein, and apply them hot.

Alſo dry baggs hot. As, Take *Bran, and the whole Seeds of Milium, or Grunwel, or ſeeds of Panicum, and Oats, each two pugils; Salt an ounce*, fry them, and make baggs to be ſhifted as in Fomentations. They are better, if you ſprinkle a little *Wine*, or *Aqua vitæ*, or *white Wine-vinegar*, to pierce.

This is ſtronger: Take *Bay-berries a pugil, Juniper-berries half a pugil, Caraway and Cummin, each an ounce; Fennel-ſeed a dram, dryed Hyſop, Savory, Thyme, Organ, Marjoram, each a dram; Roſemary and Chamomil-flowers, each a dram and an half; Orris roots a dram, Salt half an ounce*, make a Pouder for a bag, as before.

The reſidents of the Decoction mentioned, ſqueezed between two trenchers, is alſo good.

Or Cataplaſms made of them, as we ſhewed in the Inflammation of the Membrane, with Pouder of Caraway and Cummin-ſeed, *each ſix drams; Oyl of Rue and Orris, each an ounce; Pigeon or Goats dung half an ounce, with two Yolks of Eggs.*

Alſo Oyls or Ointments there mentioned, ſprinkle the part after with pouder of Cummin-ſeed, which is excellent in all Pleuriſies, to conſume Humors and Wind.

Or this Cerot: Take *Thyme a dram and half, Spike, Cloves, Sanders, each half a dram; Storax a dram, red wax an ounce and half*, with *Hogs greaſe* make a round Cerot, *and a dram of Orris pouder.*

Alſo the Emplaſter of Bay-berries malaxed with Oyl of Lillies, or mixed with the Cerot.

Or this: Take *Opopanax, Galbanum, Serapinum or Sagapenum, each two drams*; diſſolve them in equal parts *of Aqua vitæ, and white Wine-vinegar*, add *pouder of Cummin-ſeed half an ounce, Caraway, Seſeli, Lovage-ſeed, each a dram; dryed Rue half a dram, Brimſtone a dram*, with *Oyl of Rue, or Penny-royal*, and a little *Turpentine* make a Plaſter.

Another Plaiſter of Honey, and Oyl of Wormwood boyled, is good alſo.

And many outward Remedies mentioned in outward pains, from Humors or Wind.

CHAP. XI.

Of Pain of the Heart.

The Kinds.

The pain of the Heart, is the pain of the Stomach.

THe pain of the Stomach is commonly called the Pain of the Heart, this is in the fore part of the Breaſt, in a ſoft and naked place, where the Ribs are parted, which is called the Hearts lodge, and reacheth to the left ſide, as far as the Back. In this place above the reſt, there are uſual pains and moleſtations, they differ in that they are either uſual or not. The moſt uſual, are ſuch as come new from a new Cauſe, or a Diſeaſe of which they are a Symptom. Their kinds are as they are diverſly manifeſt to ſenſe.

A compreſſing or ſtretching pain of the Heart.

A Compreſſing or ſtretching pain called *Peniodyna*, is that in which there is felt a preſſing or ſtretching in the lodge of the Heart, more or leſs, with loſs of Appetite almoſt, and loathing ſometimes, and with belching, and ſomtimes vomiting, or purging.

This kind comes from ſome new Cauſe very often, and either ſtayeth a while, or comes after meat, and ends with concoction. Somtimes it is the Symptome of divers Diſeaſes, ſo that there is ſcarce a perſon but hath felt it in a Diſeaſe, or at other times.

A knawing pain of the Heart called Cardiogmos.

A knawing pain is called Heart-eating, in which there is felt a biting, with pricking in the ſaid region of the Heart, with Compreſſion or Burning ſomtimes.

This is in many Diſeaſes, and in ſound men ſometimes when faſting, eſpecially ſome called *Picrocholi*, from ſharp Choler, have it when they want their Dinner, and it is often with bitterneſs of mouth, and hindrance of ſight.

Some have it chiefly before Supper, when they are given to writing, and lean upon their Stomaches, by which they looſe Appetite. They who fear, this prevent it by ſitting upright or ſtanding, when they write.

Some have it in the morning before they riſe, when they lye long waking, and after they are up, and have been at ſtool, or broke wind, it is gone. In others it comes as ſoon as they are up, and goes away with ſneeſing.

Alſo this Knawing with Compreſſion is after meat, when it is bad, or too much. Of which *Baſrus* makes a private ſort of Heart-ach, when they are cold after meat, with ſenſe of this Compreſſion and difficulty of breathing; this is called a turning of the Meat into Flegm: Of which *Galen* ſpeaks.

Cordiaca Fainting.

This may be at all times, and from other Cauſes, as it is afore Vomiting, and from outward Injuries and Cold, or from things ſwallowed that hurt the Stomach. And when any fainting comes with this Diſeaſe called *Cordiaca*, as we ſhewed in Fainting.

Heart-burning.

That pain which hath ſuch Heat that it ſeems to burn, is in ſound people often, whether full or empty.

That is moſt uſual, in which when they would belch they

they feel great burning, the flame as it were, being shut up in the Guller, and not able to get out, especially after meat, or violent Exercise: the Germans call it *Boyling*, we call it a *Burning* boyling of the Stomach, of which we spake in Difficulty of Belching.

Boyling of the stomach, or burning.

Also this Burning is the Symptom of divers Diseases, of the great pain of the Stomach, where it is burning, pricking, stretching and beating, and is increased by touching of the part, and reacheth to the Back, and girds the Body like a Girdle, and seems to draw down the Shoulders, and there is labour and pain to swallow and belch, and difficulty of breathing, being quick and little, and there is sometimes a continual Feaver, by which means the Pulse is quick, and Urin high, with Spitting of Blood or Matter. This is called the Inflamation or Phlegmon of the Stomach from the Cause of it. And the Imposthume of the Stomach, though it is more properly so called, when it is turned to an Imposthume.

Also a most burning pain, with vomiting, and other dangerous accidents, may come from another Disease of the Stomach, called *Eryſipelas*, as we shall shew in the Causes.

Cardialgia.

The usual pain in the lodge of the Heart is called *Cardialgia*, distinct from *Cardialgia*; this comes from a small Cause, and returns often. There are two kinds of it according to the diversity of the Nature, in which they are known by this some are of weaker, and others stronger Appetite.

Weakness of the stomach is called a disturbance of the Heart.

Such Natures as have weak Appetites and other accidents from weakness of Concoction, are subject to usual pains of the Stomach, compressing or stretching, and sometimes knawing, and are troubled from the least offending meat, and other outward things, especially cold, from which they are forced alwaies to defend their stomaches. These pains come from Weakness of Stomach, and are there described, and are called by the same name.

A hot stomach is called a disturbance of the Heart.

Those Natures that have stronge appetites, and eat greedily, and gorge themselves, have pains of the stomach, as shall be shewed in the Causes. They are from great excess, and also sharp, or salt Meats: these pains are called a hot distemper, and are described in a hot Constitution.

The Causes.

The place or part affected, is the region or lodge of the Heart, not the Heart it self, for it is not under it, nor is it sensible, as I shall shew, but the Stomach which is in that region, or some parts of the Colon or Midriff, that reach thither.

The cause of Heart-ach is in the stomach.

The Cause of this, is from the Stomach which is on the left side of this Region, and is very sensible, especially at the mouth of it, which hath very remarkeable Nerves. And this mouth of the Stomach is called *Cardia*, because it is next under the Heart, and there goeth through the Midriff, and joyneth to the Ventricle, and therefore the pains thereof are felt, as if they were in the Heart, and as it were communicated unto it, and cause a Swounding, if they be great: as we shewed in Cardiaca. All these pains in this region are called pains of the Heart, or *Cardialgiæ*. And the pains of the Stomach are divers, by reason of its exquisite Sense, and often injuries by things taken in, and brought to it, and because it sticks out, and is so exposed to more danger. These pains are either primarily in the stomach of it self, from some cause afflicting it, as a Disease, which is either a hot or cold distemper, stretching, heaviness, twitching, or irritation, especially when there is a helping Cause, that is a Disposition of the Stomach, from a weak or hot Constitution. Or they are by consent in the stomach, from the nerves that are planted in it. These pains I have seen but seldom, but they were with much grief and mourning, and sometimes a little doting, and they alwayes ceased after vomiting, they are chiefly in Scmitertians. Of these in their order.

A hot distemper of the stomach, is the cause of heart-ach.

A hot Distemper alone without matter, doth scarce cause pain, because the stomach is delighted with hot things, and when it is very hot, from things taken in, or hot Diseases, as in Feavers, Heat of the Liver, and the like, there is thirst rather then pain, except another accident happen as we shall shew in the hot Constitution of the Stomach.

Inflammation of the stomach is the cause of heart-burning

The Stomach is sometimes so inflamed, that from the Veins abounding there, Blood is sent into the substance thereof, and then follows that burning pain, which we call an Inflammation. It is sometimes pure, sometimes with an Eryſipelas, when the blood that flows to it, is very thin and hot, and then the heat is greater. An Inflammation is seldom in the stomach, because it feeleth any hurt, and presently rouleth up and down; or never, except it be from great violence, as a contusion or stroak upon the Stomach being full, or from taking of very hot things actually or potentially, as Spanish-flies or Sublimate. Also it may be from heat of the blood in the Meseraick Veins in Feavers or other Diseases sent to the Stomach, without any outward Cause. And this Inflammation is turned sometimes into an Imposthume and then the pain increaseth, and when it breaks, matis vomited.

A cold distemper of the stomach, causeth knawing of the Heart.

A simple cold Distemper whether dry or moist (though some deny it) being an enemy to the Nerves, causeth pain in the stomach, which is with knawing, and as it were Fainting.

This comes from exposing the naked stomach to the cold air, in lean people especially, when they go not warm cloathed, and are hot or sweat, and then open their breasts: From whence I have known great complaints of Heart-ach, with Fainting. This may come also from other cold things as Water, and the like.

The same may come from drinking cold Water or Wine, with Snow-water, or Milk, especially when the Body is hot, as often people do. From whence many grievous accidents have been to my knowledg.

The same may come from a cold Humor, suddenly falling upon the Stomach from the Head, which causeth Loathing and Compression, or from glassie sour Flegm flowing to the Stomach, for that which breeds in it by degrees, moistneth and loosneth it, and rather causeth weakness then pain, except it cause Heaviness by the quantity, as shall be shewed.

A stretching, heaving, or a compression of the stomach, is the cause of a pressing and

When the Stomach is stretched, or burdned, or pressed inwardly or outwardly, it hath a pressing pain, and sometimes knawing, this may come from

divers

ſomtimes of a knawing pain in the Heart.

divers following cauſes.

Meat rather then drink (which ſooner goeth through, and as *Hippocrates* ſaith ſooner filleth then meat) being taken abundantly, burdens the ſtomach and ſtretcheth it: Eſpecially after a ſupper, hence the old ſaying *ut ſis nox Levñ, ſit tibi Cæna brevis.*

If you'l have a good Night.
Let your Supper be Light.

For they who feed too freely, hinder the free motion of the Diaphragma thereby, which cauſeth difficulty of breathing, ſo that they are in danger of Suffocation, as one whom I knew that eat bread for a wager, and a Virgin that had crammed her ſelf with Cheſnuts, were, and an old woman that died with eating of too much Meat and Eggs upon an Eaſterday. The ſame may be alſo when any hard thing is taken into the Stomach as when it is filled with Cherry ſtones, or other hard ſubſtance, as the Mountebancks, that eat flint ſtones for Money.

The inflation of the Stomach and the cauſe thereof.

Wind filling the ſtomach, cauſeth a ſtretching pain, which is called the Inflation of the Stomach. This comes from crude, wateriſh and windy meats and drinks, or a humor of that nature. Or from crudity of the Stomack, or from want of Concoction, which being bred there ſtretcheth it, and if it be much in quantity, maketh it heavy. The ſame may come by a humor, that comes out of the Guts into the Stomach, which is rare, and then the belching is ſower and as of roaſted fleſh.

If Air be taken into the ſtomach, as ſomtimes by greedy drinking, it doth the ſame if it be any quantity and remains there: but this is ſeldom, becauſe after meat taken in, it is forced up again by belching. But if Wind or Air be mixed with meat, as we ſee in Puddings while they are filling, then it ſooner offendeth and ſtretcheth the ſtomach.

A crude flegmatick excrementitious humor being in the ſtomach from crudity, or from the Head by Defluxion, offendeth it by diſtemper, if it be cold, and by compreſſion alſo, if it be much, and turns into wind. This crudity comes from weakneſs of the ſtomach, or want of Concoction. And if thereby crude flegm be produced, it cauſeth the diſeaſe called the turning of meat into flegm.

A hard preternatural tumor in the ſtomach, as a *Callus* after ſome hurt (ſuch as I have ſeen in the ſtomach of a Swine that was wounded formerly there, and in the bladder of a Cow) or any other hardneſs or ſcirrhus that breeds therein, doth burden and moleſt it, and the more after meat.

Alſo the ſtomack may be afflicted by the parts adjacent, when too ful or obſtructed, or ſwollen, or hard, they preſs upon it, or inflame it. As by the Liver over it, or the ſpleen under it, or the Reins near to it, or the Diaphragma inflamed, or by the colon Gut growing to it, when it is ſtretched.

Alſo from the bending inward of the ſword bone, when it is ſo confirmed, the ſtomach may be offended, when it is ful and ſtretched and hits againſt it. And it will be ſo, till the meat is digeſted, or the ſtomach fals off, by the patients lying upon his Back. This I have known in many.

The ſame may be from outward, hard and heavy things lying thereupon, not for guarding or keeping warm the ſtomach, but to make the body ſlender, which women much delight in, and therefore uſe busks and ſtreight bodies. Theſe offend the ſtomach, eſpecially after meat, and they endure it patiently, for pride feels no pain.

Twitching of the Stomach, is the cauſe of the knawing of the Heart.

Twitching and alſo tickling of the Stomach, cauſing ſtraining and vomiting, and turning of the ſtomach (as they call it) produce the pain that goes before. This is greater and longer in thoſe that cannot vomit, or with much difficulty do it. This is cauſed by all things that provoke loathing and vomiting, and is in all diſeaſes that have the turning of the Stomach. Alſo by worms rather moving then ſucking the mouth of the ſtomach, which is very ſenſible.

A ſtrong irritation of the ſtomach is the cauſe of a knawing or burning pain of the Heart.

A ſtrong provocation doth more turn and offend it, as when vomits are given of Hellebore, Stibium, precipitat, which burn, knaw or prick the mouth of the ſtomack, or poyſon taken, which offends both Stomack and Heart, and cauſeth both Cardialgia and Cardiaca.

Or ſharp Food, as Onyons, Leeks, rotten Cheeſe, or burning food, as Water-creſſes, Water-Parſley or the like, after the eating of which, they eſpecially who have hot ſtomachs, feel burning and knawing. Alſo this pain may come from meat, which is not of it ſelf ſharp, but turneth ſo by corruption in ſome Stomacks which eaſily corrupt. as from ſweet, fat and ſtinking meats, and moiſt; As Eggs, Milk, Cowcumbers, and other ſuch fruits, theſe by corruption, do not cauſe a cold matter (as they ſuppoſe) but that which is ſharp and cholerick. The badneſs alſo, and corruption of meats in hot ſtomacks eſpecially, may cauſe the boyling of the ſtomach, as when the hot burning juyce of the meat boyleth, in time of concoction, if there be a violent motion at that time, which diſturbeth the ſtomach, and confuſeth the meat therein, it ſendeth forth a burning vapor like a flame, from the bubles that break. This vapor laboring to come forth by belching (as we have ſhewed in difficulty of belching) gets into the ſenſible ſtreight paſſages of the mouth of the ſtomach, and then burneth it, and when it is diſcuſſed the pain ceaſeth, and when a new vapor ariſeth (as we ſee in the boyling of Hafty pudding) the heat returns, and ſo long till the concoction is finiſhed, or ſome drink is taken to quench it, or to allay the ſharpneſs of the juyce from whence the vapors ariſe.

The ſtomach is often provoked alſo from Choller yellow or green, or from Melancholly, and if it ſtick faſt it knaws and burns it.

This choller breeds in the ſtomach from things eaten, which have evil juyce, or breed choller, or is ſent into it by the gut called *Duodenum* and cauſeth knawing and biting, eſpecially when the ſtomach is empty, in thoſe called *Picrocholi*, or men of a ſharp cholerick conſtitution. If this choller get into the ſubſtance of the ſtomach, the burning will be longer. As it may from the gall touching it, for that part of the ſtomach that lyeth upon the gal and cloſe unto it, may be dyed yellow thereby, ſo that the ſtaine may reach to the inſide of the ſtomach, as we have often obſerved in Anatomyes of ſuch, who had alwaies burning ſtomacks. This is uſual with them, who have much choller in their Gall, which being waſhed, paſſeth through the bag that holds it, and infects all the parts near, inwardly and outwardly, as I have often ſeen. And this is moſt in them, whoſe ſtomach is ſeldom empty, but alwaies gorged. Or in ſuch who writing or the like bend their body, ſo that they violently preſs the ſtomach upon the gall,

and

and as it were squeeze it, at which time also the burning is greater.

The Erysipelas of the Stomach. Also the pian must needs be great and burning and dangerous, when there is an *Erysipelas* of pure choller, in the substance of the stomach. This is a sad disease with continual vomiting.

If the stomach be cut or prickt from swallowing of Thorns, Needles, or Grass, (as drunkards have often done) there is not only a knawing, but pricking and tearing pain.

The stomach is also pained from maliguant and venemous humors, in other diseases, and there is also fainting.

The weak constitution of the Stomach causeth the weakness thereof. The weak constitution of the stomach called weakness of stomach, (which others call a distemper which weakneth, and causeth not pain) because it causeth slow concoction and crudity from thence, produceth divers Symptoms, as lost Appetite, loathing, belching, Cachexy and the like, mentioned elsewhere, and pains by reason of Excrements that come thither, and the *Cardialea*, or Imbecillity of the stomach.

This weakness of stomach, is from want of natural heat, either at the first birth, or by old Age; or from long diseases, by which the stomach hath been often weakned, or from great Evacuations and Venery, which have weakned the whol body and the stomach also. Or from coldness and moistness, which makes the stomach loose, or from dryness, by which it cannot fitly embrace the Food. This distemper may come from external or external causes or diseases that change the temper of the stomach to be cold, moist or dry, which causeth imbecility. Somtimes it comes from a fault in the Organ, or part it self. As when it is too thin from too much distention through gluttony or drunkness. For the thicker the stomach is, the better it concocteth (as we may see in birds, whose thick stomach concocteth the hardest things.

The hot constitution of the stomach, causeth the hot distemper. If the stomach be naturally hot, or by use of hot things in youth, sooner then they ought to use them, or made so by a disease, which hath shriveled it though it be not a disease of it self, if it be rightly ordered, yet it is a cause why some meats sooner corrupt, and turn into choller and sharp humors, and so by accident causeth a *Cardialgia*, which comes from such humors. This disposition of the stomach, is known chiefly by thirst and delight in sour things, and distast of sweet. So that hot, sharp and salt things and wine they leave, and digest the hardest meat sooneſt, and the other easily corrupteth.

The cause of pain of the Stomach, is in the Nerves. In almost all diseases, with great pain the stomach suffereth by consent of the Nerves, of which the mouth of the stomach is ful. Hence it is that in the colick and stone and other pains in parts distant, as of wounds and contusions, we see not only the Appetite lost, but a pain in the stomach, so that if they receive a wound when the stomach is full, they vomit.

Also the stomach being of most exquisit sense, doth easily receive an injury, though never so smal, and is greatly offended at a great, by reason of the Nerves. So that there is often a Syncope or swounding, moreover by reason of this consent of the Nerves, in great passions of the mind, there is a Head-ach from the stomach offended, and other hurts, as loss of Appetite and the like.

The cause of Heart-knawing, is in the Colon. The pains of the Gut called *Colon*, which is at the bottom of the Stomach, and joyned unto it by the Caule, are referred unto Heart-pains also, because they are in the region or lodge of the Heart. As if the Colon be stretched by Wind and Excrements, it comes to pass that the pain seems as if it were in the stomach, yet it stops not long, but runs to the sides downwards. And in other pains of the Heart, we find that they go upwards, and are about the stomach; so that some pains of the Colon seem to be pains of the stomach. Hence it is that when they lye long a bed in the morning, and sleep not, because the Excrements which they use to void presently, when they arise being retained in the upper part of the Colon, not being able to go down while they are in bed, do pull and twich the Colon, and provoke the Stomach by consent, and there is Loathing and Heart-pain, which ceaseth when they are up, and the Excrements descend, especially if they break Wind downward, or go to stool.

And hence it is that after a purging Medicine, when it begins to work, and the evil Excrements pass through the upper part of the Colon, till they have a stool, they feel a noise and Heart-ach often, so that they swound and vomit, and the pain returns when they again to stool. All these things shew that the Cause is not in the Stomach, but the Colon: For if it were in the stomach it would have begun at the first taking of the medicine, and while it was in the stomach, and not a go long time after, when the Medicine was carried with the Excrements into the Colon, and laboured to get out.

The cause of pressing-pain is in the midriff. When the Midriff is afflicted, which toucheth the stomach all over behind, and groweth to it; there are pains in the region of the Heart, because the Midriff being molested with evil and many vapors, as in the night-mare, mother and the like, it causeth besides short breathing, a pain which girts the Body like a Girdle: And if the stomach consent, that condoleth. As a difficulty of breathing comes from a Disturbance of the Stomach by the Midriff.

The Cure.

The Cure is according to the Causes thus. First we must cure the Diseases of the Stomach, from whence come divers sorts of Heart-ach, hurt of Functions, and Crudities. The Diseases are these; Inflammations of the Stomach, or coldness, or stretching, or windiness, or heaviness, twiching, or irritation; or else the weakness and hot constitution thereof: Or a Disease by consent from the Nerves, and from the Colon and Midriff.

The cure of inflammation of the stomach. The Inflammation of the Stomach is seldom, and never but from a violent Cause, and is more dangerous, because it is in a sensible and noble part, especially if it be great, for then there is a great pain and also Convulsion. And it is better cured by dissolving then by Suppuration; for so it wil turn to an Ulcer, which is a new Disease, and as dangerous as the former, hard to be cured, and which will leave a Callus or Hardness in the Stomach.

If it be beginning, your aim must be to hinder the increase, and abate the Heat, with respect to the Fever, and asswage the pain and fainting fits, which are usual and to dissolve the matter that is there, and if that cannot be done to bring it to Suppuration, and cure the Ulcer; thus.

At the first let blood in the Arm, for though the veins of the Stomach come from the branches of the Gate-vein, yet drawing blood from the branches of the hollow Vein, is good against the Feaver and for Revulsion.

Give also a cooling Clyster to revel and abate pain, for that will reach to the Colon, and communicate its force to the Stomach, under which the Colon lyeth.

You must not give strong Purges, for they going presently to the part affected, will cause pain, and increase the Distemper by their Heat; but loosning temperate Purges in the progress of the Disease can do no hurt: As Cassia which also asswageth pain, and pulp of Prunes, and Tamarinds, and the like.

Medicines to alter the Distemper must be cold, both actually and potentially, and in the beginning while the Humor floweth must be a little astringent, and afterwards moist, mixed with things that abate pain. Thus:

Those Sauces which are good in a hot constitution of the Stomach, and cooling, as we shall shew are good here.

Cabbage chiefly, and Rapes, and other Fruits, boyled and kept in pickle, are good against heat.

And cold Spring-water, with Snow or Ice, is good drink in the opinion of some; but I think it not safe, for a sudden Repercussion is dangerous. It is better at first with a little Vinegar, and more pleasant with Sugar boyled like a Julep.

Cold Milk is good, and allayes pain.

Or an Emulsion of the cold Seeds to ease pain, and heat with Poppey-seeds.

Dioscorides commends the Water of wild Vetches, also Plantane, and Rose-water, and Vinegar, and Sorrel-water.

And the Julep of Roses and Violets.

Or, Take *Rose-water three ounces, Plantane-water two ounces, juyce of Sorrel or Pomegranates an ounce and an half, Sugar of Roses an ounce*; boyl and strain them, give *two ounces* at a time.

Or the Decoction of Barley, cold, with Violets.

Or thus: Take *Barley a pugil, Cowcumber-seed half an ounce, Liquoriss an ounce*; boyl and drink them cold.

This is cordial also. Take *Liquoriss an ounce, Citron-peels two drams, cordial Flowers, each a pugil; Flowers of Water-lillies half a pugil, Barley a pugil, the four great cold Seeds two drams, Purslane-seed and white Poppey-seed, each a dram; Citron-seeds half a dram*: boyl and sweeten them with *Sugar, or these Syrups.*

In the beginning give Syrups with spring or distilled Waters, those that cool and bind; as that of dryed Roses, Quinces, green Grapes, Ribes, sour Pomegranates, Bar-berries. In the progress that cool and moisten; as of Violets, Purslane, Water-lillies. And if the Liver be also hot, as it is commonly, and for the Feaver give Syrup of Succory, and Endive. And against Fainting, Syrup of Bugloss. And to asswage pain, Syrup of Poppies.

Or thus: Take *Syrup of Violets, and Quinces, Syrup of Ribes, or Pomegranates, or of Endive, each half an ounce; Syrup of Poppies three drams.*

Also the candyed or preserved and conserved Fruits abovesaid and of Citrons, Gourds, or Lettice, or Coleworts.

This is cooling and cordial: Take *conserve of Roses an ounce, conserve of Violets, Citrons and juyce of Ribes, each half an ounce; species Diamargariton frigid and Diarhodon and red Coral, each a scruple; with sugar of Roses*, make a mixture.

To resolve the residue of the Inflammation, or the Imposthume of the Stomach use these at the end.

First, give *Chamomil and Endive water, then six ounces of Chamomil water alone*, often

Or: Take *Chamomil and Endive water, each an ounce and an half; Sack an ounce, spirit of Wine a dram, with a drop or two of spirit of Vitriol.*

Or this Julep: Take *syrup of Endive and Wormwood, each an ounce; Mint and Elicampane water, each an ounce and an half, with Triasantalen half a dram*, give it now and then.

Turpentine washed with Wormwood water, given twice or thrice, dissolves or ripens the Impostthumes of the Stomach.

Apply outwardly coolers and anodynes, with strengtheners.

As this Oyntment: Take *Oyl of Roses an ounce and an half, Oyl of Violets, Rose Vinegar and juyce of Hawkeweed, each an ounce*; boyl them till the juyces are consumed, add *red Sanders a dram, red Roses half a dram, Spike a scruple, Campher half a scruple, with white Wax*, make an Oyntment.

This Cataplasm is good for the beginning of the disease. Take *Violet-leaves, and Snakeweed, and Vine-leaves each a handful: Roses, Violets, and Comfrey-flowers, each a pugil*; stamp them, add *Barley-meal, or Bran.*

In great pain. Take *Chamomil, and Melilot-flowers, Roses, and Violets, each a handful; Wormwood half a handful*; boyl them in *Milk*, add *Barley-meal six ounces, Coriander-seeds and Sanders, each two drams; Oyl of Chamomil and Dill, each an ounce*: make a Cataplasm.

Or this Fomentation against Inflammation. Take *Rose and Plantane-water, each three ounces; Wormwood-water two ounces, Rose-vinegar an ounce, red Sanders two drams.*

Or this Epithem against an Erysipelas of the Stomach. Take *Rose, Sorrel, Nightshade, and Succory-water, each two ounces, Wormwood-water and white Wine, each half an ounce; Rose-vinegar two drams, Diarrhodon a dram, Coral and Ivory, each half a dram*; apply it to the Stomach.

Use these to dissolve the Impostthume, as this with a Spunge. Take *Wormwood, Mints, and Snakeweed, each a handful; Chamomil and Dill-flowers, each a pugil; Fenugreek and Bean-meal, each an ounce; Mastick two drams, Nutmeg a dram*: boyl them in *Wine* for a Fomentation.

Then anoint with this: Take *Oyl of Wormwood and Chamomil, each an ounce and half; Turpentine half an ounce, Mucilage of Marsh-mallows and Fenugreek-seed, each two drams; Mastick a dram and half, Cloves a dram*, with *Wax* make an Oyntment.

Or this Cataplasm. Take *green Wormwood a handful, and Mints half a handful*, stamp them, add *Bran and Linseed-flowers, each an ounce; Roses and Chamomil-flowers in pouder, each a dram; Mace half a dram*, add *Oyl of Wormwood.*

Or use Melilot-plaster dissolved with Oyl of wormwood.

The cure of an Impostthume of the stomach after Inflammation.

If the Inflammation do impostthume, ripen it with remedies in the Quinzie given at the mouth.

And with things there outwardly prescribed, only ad some things that may respect the Stomach, being a more noble part.

As this Cataplasm. Take *Orris and Lilly-roots, each two ounces; Wormwood and Mallows, each a handful; Chamomil-flowers and Roses, each a pugil*; boyl them in *Wine* and *Water*, stamp them, and add *Wheat-flour four ounces, Linseed poudered an ounce, yellow Sanders a dram, Saffron half*

half a dram, Oyl of ſweet Almons two ounces: make a Cataplaſm.

Or uſe the Emplaiſter of Diachylon with Orris and Oyl of Mints.

To open the Impoſtume, uſe things mentioned in a Quinſie. Or this, Take *Wheat flower four ounces, Pigeons dung half an ounce, Oyl of Wormwood an ounce, Honey an ounce,* make a Plaſter.

Alſo Roaring, Neeſing, Coughing and rubbing of the Stomach and Vomit, will break the Impoſthume.

If they vomit matter, give Barley water and Sugar to cleanſe, with Honey of Roſes.

The Cure of Cardialgia, from a cold Stomach.

Then ſtrengthen the Stomach, as in imbecility.

If coldneſs of ſtomach come from outward injuries or cold water drunk and produce *Cardialgia*, give and apply hot things actually and potentially ſo. And the pain will be abated.

Of which we ſhall ſpeak in Imbecility of the ſtomach from cold.

And alſo of that cold that comes from a humor; for Imbecility, is the cauſe of both.

But if the cold be ſo great that not only the ſtomach, but parts adjacent ſuffer, & a Dropſie or *Cachexy* follow (which comes by drinking much cold water, when they are very hot (we ſhall ſpeak of the Cure of that, in the hurts of the bowels.

The Cure of Cardialgia, from Deſtention, Inflammation, and aggravation of the Stomach, by Wind, Meat, Humor, Tumor or Bowels adjacent, or outward injuries.

As the cauſe is, ſo muſt Diſtention, Aggravation or Inflammation of the Stomach be cured.

If it come from Wind, which proceeds from Meat, Humor or weak Concoction, it cauſeth a ſtretching pain: becauſe there muſt be good dyet to hinder the breeding of Wind and Evacuation, and hot remedies uſed to help concoction and diſcuſs wind inwardly and outwardly, we ſhall ſpeak of it in weakneſs of ſtomach, from crude humors.

If the Stomach be ſtretched by Air, taken in with drink, except it be belched forth again, we ſhall Cure it, as in the Cure of wind.

If there be ſtretching and heavineſs, from plenty of things eaten, and compreſſion after Concoction and Digeſtion, by excercife it will away.

But if it be great and will not yeild by reaſon of the quantity or quality it muſt be vomited up or purged & the ſtomach ſtrengthened. All which are uſed againſt thoſe cauſes that weaken the ſtomach, and becauſe there is alſo weakneſs, we ſhall ſpeak of it in Imbecility of the ſtomach.

As alſo if this ſtretching or heavineſs, comes from a crude humor, we ſhall ſpeak of it there, becauſe that is the cauſe of weakneſs, and this is the cauſe of that.

If it come from a hard Tumor, after a wound, or a Scirrhus, although it be difficult, and there will be alwaies ſome heavineſs after, meat eſpecially, and weakneſs, let the Cure againſt weakneſs be ſufficient: yet uſe Emollients, as ſoon as you ſuſpect it, and conſume it, if you can.

The beſt way is to give Turpentine pills with Gum Ammoniack and Maſtick often.

Or theſe: Take *Gum Ammoniack*, diſſolved in *juyce of Orris, Maſtick, each a dram; Storax, Myrrh, Ladanum, each half a dram; with juyce of Orris*, make pills, give *half a dram* often.

Or give *a drop or two of Oyl of Myrrh or Maſtick with Sugar*, or otherwiſe.

And apply outwardly things mentioned in the hardneſs of Liver and Spleen.

Or thus: Take *Mallows or Wormwood, each a handful; Chamomil flowers a pugil, Schænanth two drams, Figs twelve*, boyl them in *Wine*, ſtamp them, and add *Gum Ammoniack and Bdellium*, diſſolved in the Decoction, *and Myrrh, of each two drams; with Honey*, make a Cataplaſm.

If the ſtomach be oppeſſed, by the Liver, Spleen, Reins, Colon, Midriſe being ſtopt, ſtretched, ſwollen, hardned or inflamed, Cure it, as in theſe diſeaſes, for the heavineſs will not away, till they be removed, nor the difficulty of breathing, though they complain leaſt of them.

If it come from the crookedneſs of the ſword Griſtle bent inwards and preſſing the Stomach, it is incurable, and no reſt can be, till the patient lye upon his Back, that the Stomach may remove from it: or till there is a compleat Concoction.

If it come from hard things, outwardly preſſing, remove them, and if they have done any hurt, mend it.

The Cure of Cardialgia, from twitching and tickling of the ſtomach.

If the twitching of the ſtomach cauſe loathing, rather then pain, Cure it, as in loathing. If worms cauſe tickling, expel them, and any other Diſeaſe that cauſeth it

The Cure of Cardialgia, from Irritation, or provoking, or from things ſwallowed, or from Medicines, or from poyſon bad Dyet, or evil humors.

If there be Irritation or reaching with pain, knawing, pricking or burning cauſed by things ſwallowed, that wound the Stomach; firſt remove them, if poſſible, not by force, as vomiting (for ſo the ſtomach wil be cloſed and the things that hurt will ſtick faſter) but by things that make way, and waſh, and make them deſcend, that they may not hurt the entrals for they do not eaſily fix though ſharp, but are caſt down by the Stomach and Guts, as other hard things, and ſtop not, till they come at the ſtraight paſſage of the Fundament. For we think it impoſſible (as ſome ſay) that they ſhould paſs through the Veins, by the Meſeraick and Gut out at the ſkin. Yet we have obſerved, from a Famous Chirurgion, from whoſe mouth I had it, with great admiration of the hearers, that a Needle ſwallowed, which ſtayed long in the body, came out at the Reins, by the right Kidney in an Ulcer. And I my ſelf ſaw and handled a piece of Glaſs, which came out by Urin, by a ſtrong Diuretick, after a great and ſharp pain in the Uriters and fit of the ſtone.

Theſe are waſhed away with great draughts, of fat things eſpecialy, which relax the paſſages, as of broath, Milk, Oyl or Butter, which done, if by the pain we ſuppoſe that a Needle or a thorn be faſtned, then we prevent, or Cure an Inflammation, as we ſhewed in Inflammations. If by reaſon of great hurt they vomite blood, we muſt ſtop it, as we ſhewed in vomting of Blood. If matter come forth, we muſt give cleanſers, as was ſhewed in Ulcers of the Jaws and Gullet, and then dryers to heal, as was there alſo ſhewed. But this is hardly done in this noble part ulcerated, and if it be done it leaves a *Callus*, which cauſeth weakneſs. Here we ſhall ſhew how theſe two laſt are to be done.

Whether it be from things ſwallowed or Choller, or evil juyce, vomiting is good, and though it come of it ſelf, yet nature is to be helped, if it be not ſufficient, to caſt out the offence.

The Vomits muſt be ſuch, which waſh the ſtomach, and

and make the vomiting easie. as warm water, Broaths or Drink plentifully taken; with Oyl, Butter or the like, which turn the stomach and allay sharpness; or with Honey and Sugar, which also clense. Also Barley water is good.

In a cholerick sharp juyce, give things to abate it, as water, or the like, with Vinegar, syrup of Sorrel or Oxymel, and other Vomits mentioned in Feavers.

Also gentle Clysters to draw it out of the Stomach. And though the body be loose (as it needs must be by the provoking of the expulsive faculty) yet Clysters are good to take away pain in the Stomach and Guts, for they can get into the Stomach by the Colon.

Also Suppositories revel and do some thing thereby, examples of all these are in the Colick.

When there is choler, or sharp juyce, or any violent thing swallowed, whether Medicine, or Poyson, or other things that hurts the stomach, it is good to purge, because nature tends that way. And there are many purgers of choler mentioned in cholerick Feavers, good in this case, if they be so ordered that they may not trouble the stomach: thus.

Take *Cassia ten drams, or Catholicon ten drams, or three drams of the Electuary of juyce of Roses*, or the like, *as Diacydonites with Scammony alone, or with Sugar, or with Wormwood water, or of Endive*, when you will temper choler; but when you will clense, with *Barley or Pease broath*. But when you will loosen more, with a Decoction of Fruits and old Cocks broath. *Rondeletius* commends Fish broath, or Whey, or Posset: or if bitter things will down, the Decoction of Wormwood, which is clensing, and is good against both choler and flegm.

Or give *three ounces of syrup of Roses, or an ounce and an half of syrup of Roses with Rhubarb, or Senna, or that of succory with Rhubarb, or of Wormwood.*

Or this Decoction: Take *sweet Prunes and Tamarinds, each half an ounce*; *Endive a handful, Violets a pugil, Barley a pugil, senna half an ounce, Polypody six drams. Epithymum two drams, Annis seed a dram*, boyl them, *with sugar, syrup of Violets, or Roses*: make a Potion.

Or this infusion: Take *Rhubarb four scruples, Senna two drams, Wormwood a dram, Spike half a scruple*, bruise and sprinkle them *with white wine*, and add *Endive and wormwood water*, infuse them, and add *syrup of Roses an ounce*, give it. You may mix with it the *Laxative* afore mentioned.

Another infusion in wine of wormwood, better for the stomach: Take *Senna an ounce, Rhubarb a dram and an half, yellow Myrobalans three drams, wormwood two drams, Cordial flowers a dram, Spike a scruple, Fennel seed a dram*, steep them, (being bruised) in *white wine* that is *final, twenty four hours*. Give every day a draught.

Pills for the same: Take *Aloes* (which is good to clense both choler and flegm) *a scruple, Rhubarb half a dram, Spike three grains, Scammony two or three grains, with juyce or syrup of Roses*: make a Dose of Pills.

Or give *a dram of Pills of Rhubarb, or scammoniate Pills*, if need require.

If the stomach be provoked by a bad Medicine, or poyson, or burne, or be corroded; give things to alter by moistures to abate the force, or by slymeness to defend the stomach, and that will heal, and resist Poyson.

As warm Milk, or Cream of Almonds, or Pinenuts, or of Cold seeds, or Barley Cream.

Or the milky juyce of Goats beard, Hawkweed, Sowthistle, Sycomore, in Corrosions are good.

Or the Mucilage of Lineseed, Fleabane, apples Pears or Quinces.

The Decoction also of Lineseed heals the Stomach, when it is corroded by taking of Spanish Flyes.

Or: Take *Marsh-mallow roots an ounce, Comfrey roots half an ounce, Line and Quinceseed, each a dram*; boyl them in *Water*, and add *Sugar*, drink often thereof.

Or oyl of sweet Almonds, in a good quantity, or the oyl of Sesamum, commended by *Dioscorides*.

If the stomach be poysoned, give Treacle and Mithridate and the like, which are proper to take away the cause and the pain. But after a violent purge, they do more by stupifying the expulsive faculty, then by the way of Antidote.

You may also give Antidotes, without Opium, which are contrary to poyson, by a peculiar quality, or general Antidotes; such as are prescribed against the Plague, and biting, and stinging of venemous beasts.

If the stomach be burnt and reacheth from choller or sharp juyce, give things that moisten, and are sharp and cool, and will hinder the reaching, and also such as take the sensibility away, and asswage the pain.

As sour Fruits take away the burning of the stomach, Citrons, Limons, Orenges, Pomegranats, Apples, Plums, Cherries, Grapes, and Strawberries, and chiefly Currans and Berberries.

Also Lettice, Endive, Violets, Borrage, Sorrel, wood-Sorrel, Vine leaves and Berberry leaves in sallets, or otherwise.

Dioscorides commends simples against the burning of the stomach and some of them are hot, as scordium, Pennyroyal, spicknard, smallage, flowers of Comfrey, sweet rush, Piony seeds, and wild Laurel, and juyce of Liquorish.

Also Flesh, or Barley broath, with cooling and moistning herbs, and Vinegar, or other sour juyces, or the Decoction of Wormwood, or the juyce of the Fruits aforesaid, or sharp Herbs alone, or with sugar, or syrups, if they be two sharp.

In a cholerick stomach, wormwood wine doth quickly help, by clensing flegm and Choler.

Or a sharp syrup alone, or with waters, or Decoctions, as of sorrel, or Vineger, or Oxysacharum, or of Pomegranate juyce, or of the syrup of them, or of Apples, Plums, Limons, Citrons, unripe Grapes, of Currans, Berberies, sorrel, or that of juyce of Quinces boyled, or quidiney of Quinces with wine, or Vinegar to make it sharper. And so you may mix other syrups, that are too sweet, to beat down and suppress choler, which two sweet things will breed. Also syrup of Violets, Roses, or Juleps thereof, also of Endive, succory and Water-lillies, and the like, well mixt with waters, or Decoctions, for so they suppress choler not only by cooling, but wetting, especially if they be sharp, to all which, add syrup of wormwood to clense choler.

Also Conserves and Candites of the same Fruits and Herbs are good, (but alwaies be ware of sweet, they will heat choler) and Conserve of quinces, Citrons, Gourds, Lettice, Colewort.

Also juyce of sharp fruits without sugar, as the ancients did, or with Vinegar, usually they are without sugar, as of Currans, Berberries, unripe Grapes, or these.

Make Electuaries of these mixed, as that called *Diacydonites*

Diacydonites of Quinces without the Spices, which is made of the Pulp of Quinces, boyled with Honey and Pouder of Diacydonites.

Or thus: Take *Conserve of Roses and Sorrel, and Citron-peels, each half an ounce; Conserve of Currance an ounce, of Myrobalans candied one, the pouder of our Diacydonites, or Trionsantalon, or Diarrhodon a dram,* with *Syrup of Sorrel or unripe Grapes* make an Electuary.

And this: Take *Citron-peels, candied Quinces, and conserve of Quinces, each two drams; juyce of Currance without Sugar,* all well dryed *half an ounce, the Pouder of our Diacydonites* (which I shall after shew) *Cinnamon, each a dram; with Rose-water and boyled Sugar* make Lozenges.

Or give Crumbs of Bread steept in Juyce of Pomegranates, Lemmons, or the like, with Vinegar and Rose-water, to make it pleasant.

Or Barley-meal, with Capon-broath, and Juyce of Pomegranates, which is *Hippocrates* his remedy against the heat and reaching of the stomach.

Or Pine-nuts eaten, and Juyce of Purslane drunk after, are good against burning of the stomach.

The usual Pouders for Choler in the Stomach are Diatrionsantalon, which hath no other spice but cold seeds, Roses, Gums, Starch, Juyce of Liquorish, burnt Ivory, and Camphyre, and Rhubarb. Also Diarrhodon Abbatis which hath all the former Ingredients, and other cold, and Mastich, and some spices of hot Seeds and Cordials.

The Pouder of Diacydonites without the hot Spices is added to this Electuary, when we will only cool, and is used after Meat, and Trionsantalon, Barbary, and Sorrel-seeds, Roses, and burnt Ivory.

Instead of which; Take *dryed Quinces half an ounce, all the Sanders, each a dram; red Roses two drams, Sorrel and Barberry-seeds, each a dram; the Antispodium of* Dioscorides made of *Quinces half a dram,* make a Pouder, mix them with Pouders after Meat, or Electuaries.

Also the Pouders of the Troches of burnt Ivory, Camphyre, Bar-berries, allay the heat of Choler (they all have burnt Ivory) and Antispodium of Quinces also.

Instead of all these Pouders for hot Stomaches, use this. Take *dryed Quinces half an ounce, Citron-peels a dram, red Sanders two drams, white Sanders a dram, Liquorish two drams, red Roses two drams and half, cordial-flowers a dram, great cold Seeds two drams, small cold Seeds half a dram, Sorrel, Purslane, Barbery, Coriander-seeds, each a dram; white Poppy-seeds, Gum Traganth, and Arabick, each half a dram; Coral a dram, Antispodium made of Ivory, or Harts-horn half a dram,* and to please the Stomach *Cinnamon and Anniseseed, each a dram; sweet Sanders half a dram, with Mastick* make a Pouder: Give it with *Sugar of Roses,* or in Lozenges made with *Sugar and the Waters mentioned,* and a little *juyce of a Lemmon or Vinegar.*

A bitter Pouder easie to be made against Choler in the Stomach. Take *Worm-wood a dram, tops of Centaury, and Masterwort-roots, each half a dram;* give a spoonful with Wine.

A Pouder against Burning of the Stomach. Take *white Chalk half an ounce, Nutmeg a dram, Sugar an ounce:* Give a spoonful.

Or this: Take *Crabs-eyes two drams, Bole half a dram, red Roses a dram, Sugar of Roses half an ounce:* Use it as the other.

In great Pains give things to abate Sense, as Antidotes to be mentioned in Imbecillity, which are good here if new made, though they have many hot things, and opiate Electuaries; as *Philonium Romanum two scruples,* in Pills or Electuaries of Juyce of Roses to purge Choler, or requires *Nicolas half a dram,* with *Wine.*

Or this Drink: Take *Syrup of Poppies six drams, Syrup of Roses and Worm-wood, each an ounce;* give it with convenient *Water* or *Wine.*

If you leave out the Syrup of Poppies, and boyl in the other a grain of Opium gently, and give it with Chicken-broath, it is excellent.

In time of danger, give Narcoticks and that often. I have often with good success given my Nepenthe in a cholerick Vomiting from anger, when there hath been great pain and heat of the Body.

Outwardly of what cause soever in heat or corruption, we use Astringents and Coolers, as to keep the flux of Choler from the Liver, adding alwayes some hot things proper for the Stomach, because outwardly they cannot do hurt, but strengthen, and cause piercing: they must all be used warm.

The usually cold Oyls of Roses and Omphacine, that is of unripe Olives, Quinces, Myrtles, Mastich, with hot; as of Mints and Spike, are used with Vinegar to make them pierce, or Wine to strengthen, boyled in them till they be consumed.

A cooling strengthning Oyntment. Take *Oyl of Roses and Quinces, each an ounce; Oyl of Myrtles, or Mastick, Worm-wood, or Mints, each half an ounce; Vinegar of Roses six drams,* boyl them till the Vinegar be consumed, add when they cool *Pouder of Citron-peels, Coriander-seeds, red Roses, Worm-wood, each half a dram; Coral a dram, Sanders red and white, each half a dram; Spike two scruples, Camphyre a scruple* (to pierce rather then cool) with Wax make a Liniment, or with *Ladanum two drams, Aloes a dram, and Turpentine* make a Plaister.

Galens cold Oyntment of Roses, and the Cerot of Sanders, are good in Burning of the Stomach, and of other Bowels.

In a great Heat when you will cool more; Take *Oyl of Roses omphacine two ounces, juyce of Sowthistle, Solomons-seal, Vinegar, each half an ounce; Pouder of Alabaster half an ounce,* with *Turpentine washed* make an Oyntment.

Or use the Oyntment in the Inflammation of the Stomach mentioned.

Or a Cataplasm of Purslane, Nightshade, Solomons-seal, Vine, Sowthistle, Harts-tongue, Venus-navel, Water-lillies, wild Vine, Roses, with Worm-wood, and Mints, or Chamomil-flowers in pain, boyled in water, or Rose-water, or Horstongue-water, well beaten to a Pultis, with the Oyls aforesaid *two ounces, Mastick half an ounce, Alabaster three drams, Horstongue powdered two drams, Sanders and Cloves, each a dram;* make a Pultis.

If the pain be great, use an anodyne Cataplasm mentioned in the Inflammation of the Stomach.

Or this: Take *Toasts of Bread dipt in Vinegar of Roses half a pint, Pulp of Quinces so steeped also three ounces,* add a little *red Wine, and juyce of Quinces, and pouder of Mastick half an ounce, dryed Worm-wood two drams, Chamomil-flowers and Mace, each a dram; Oyl of Roses and Chamomil, each an ounce;* mix and apply them.

Or the Fomentation mentioned in Inflammation, or of the Herbs mentioned, or of the Oyls, with Vinegar, and Juyces of Herbs.

If there be pain; Take *Roses, wild Vine, Chamomil, Melilot or Dill, each a pugil; Worm-wood or Mints, each half a handful; Marsh-mallow roots six drams, Coriander-seeds and Myrtles, each half an ounce; Mastick two ounces, Cloves, Sanders, each a dram;* with Water and red Wine make a Fomentation.

Or use an Epithem of Rose-water and Vinegar, with a Linnen-clout, or a toast of Bread.

Or,

Or, Take *Roſe-water two ounces, Harts-tongue, and Wormwood-water, each an ounce; all Sanders, or Diatrion-ſantalon two drams, Coriander-ſeeds, Antiſpodium, each a dram*; mix and apply them. Or uſe that mentioned in Inflammation.

A Pouder for a bag, or to be ſprinkled after anointing in Burning of the Stomach. Take *Coriander-ſeeds prepared in Vinegar half an ounce, Myrtles, or Barbery-ſeeds, red Roſes, Sanders and Citron-peels, each a dram and half; Wormwood, red Coral, each a dram; Sanders and Nutmeg, each half a dram*; make a pouder.

If Choler riſe from the Liver to the Stomach, apply Cupping-glaſſes to the Liver to draw it back, and it will eaſe.

The cure of weakneſs of the ſtomach from defect of Natural heat, diſtemper, cold, or moiſt actual cold, ſtretching, inflammation, looſneſs, or other fault in the member.

Weak Conſtitution of the Stomach that hinders the Functions, and cauſeth Excrements, and ſo Cardiæa or uſual pain; If it come from want of Natural heat by birth or age, or by a Diſeaſe, and be inhærent in the Stomach, becauſe it cannot be cured, we muſt provide that by decent Diet and Stomach-medicines, that bind gently and ſtrengthen it, and heat, that it may be ſtrengthened, and the want of Natural heat ſupplyed. If this Weakneſs come from a cold or moiſt Diſtemper, and be fixed, it is difficult to be cured as the other (called the Coldneſs of the Stomach) and we muſt only keep it from growing worſe as the former, and with hotter Medicines. The cold and moiſt Diſtemper that is acquired, is taken away with hot Medicines after the Excrements are removed. But when the Stomach is too looſe and thin, though it can ſcarce be mended, yet by uſe of Aſtringents and hot Remedies in cold and moiſt Bodies, or of temperate in other Bodies, we muſt labor to bring it to its former ſtate. If it be too ſtrait and dry, we uſe Moiſtners to looſen it.

The Method of curing of which, and other Diſeaſes of the Stomach, as Coldneſs, or Stretching, or Humor crude or cold; or Inflation from Wind, is as was formerly ſhewed. Except the dry Diſtemper of which we ſhall ſpeak in the Cure of Weakneſs, becauſe it requires contrary Remedies. And the Medicines muſt be fitted divers waves, either by Diet, Vomits, Belchings, Clyſters, Purges, Alterers, inwardly and outwardly as ſhall be ſhewed.

Diet for the weakneſs of the ſtomach

Firſt in theſe Diſeaſes of the Stomach keep a good Diet, becauſe Meats goes directly into it, and muſt be digeſted by it, and we muſt have a care that it fail not therein, from whence moſt Diſeaſes of the Stomach come, or are increaſed. This is done by a decent quantity and quality of Food.

In a weak Stomach, theſe are to be chiefly obſerved in the quantity, that they eat little at once, taking heed that they be not ſo filled to feel weight, or compreſſion after Meat; and that they breath not ſhorter then afore Meat. In the manner, take heed of eating too greedily, but a little at a time, that the Stomach may cover it, not continuing ſo long at it till concoction be begun, which will be offended by adding more Meat. To refreſh them therefore that have weak Natural heat, becauſe they muſt eat little at a time, let them eat oftner then they that have ſtrong Stomaches. They who have very cold and foul Stomaches, muſt eat moſt ſeldom, and not before the firſt Food is concocted, and they have an Appetite; therefore one Meal a day is ſufficient for a foul ſtomach. And they whoſe ſtomach is pained for abundance of Food, muſt abſtain till it is digeſted. And in a fit time as in the morning, five or ſix hours after ſleep, and if they can eat twice or thrice a day, three hours afore ſleep at night, after a Digeſtion and when there is an Appetite. And before they ſleep after Supper, let there be a kind of Concoction, that the Vapors which ariſe at the firſt plentifully, may be partly diſcuſſed by waking, and may not go too much to fill the Head, by ſleeping preſently. This rule is not ſo ſtrictly to be obſerved by old and weak perſons, that ſleep not the whole night, but they may ſleep preſently after Meat at noon and night, as they deſire, which refreſheth them, and doth not hurt them, becauſe the Vapors are not ſo many as in Youth, wherein more is eaten.

For the quality of Meats obſerve the ſubſtance and the Juyce. Let it be eaſie of Digeſtion, leaſt while it is long a concocting, the ſtomach be grieved, or if it be not, or not ſufficiently concocted, there be Crudities and Wind. As the Fleſh of young Creatures, or ſlender, ſoft, and juycie Food which is eaſily concocted, when hard, dry, and tough, or ſlimy is hard, except it be artificially prepared, by roaſting, boyling, mincing, and other wayes. : By which means ſometimes good Meat is ſpoiled, as by ſmoaking, ſalting. Alſo it muſt be of good Juyce, that weak ſtomaches may be better, and ſooner refreſhed thereby, and fewer Excrements bred, which is required in all weak ſtomachs. This commendible Juyce is in all Nouriſhment from Beaſts or Plants that are true, and have not a Medicinal vertue (which is diſtinguiſhed by taſt or ſcent) except by muſtineſs, rottenneſs, and the like, they be corrupted, or made ſo that they preſently corrupt in the ſtomach, or breed Excrements or Wind by their moiſt and crude Juyce, which they have beſides the good, or otherwiſe are hard of Concoction, by reaſon of their tough ſubſtance. Meats that are eaſie of Concoction and of good Juyce, muſt have theſe qualities, and it would be too tedious to mention all. The Meat for Nouriſhment muſt be temperate, a little inclining to Heat in cold and windy Stomachs; as it may be made by ſauces, which we uſe for medicine as well as for cuſtom.

As for other things, namely the Motion of the Body and the Mind, Exerciſe is good afore meat for a weak ſtomach, and if it be much, and can be endured, it ſtirs up the Natural heat, and warms the Body, and makes it fit for other Functions, and gets a ſtomach. After Meat uſe not ſtrong Exerciſe to diſturb the meat in the ſtomach but walking or ſtanding, that the meat may go to the bottom of the ſtomach, and be better concocted. Alſo moderate reſt refreſheth and helps the Stomachs actions. And it is better after meat then great Exerciſe, which may cauſe corruption or hinder Concoction. Reſt by ſleep may help Concoction by accident (not by the ſleep but by the quietneſs of the Body and Mind) becauſe we ſee that when the Animal Functions are quiet, the Natural are moſt exerciſed. For the Concentraction or meeting of Heat in the Center which they ſay doth concoct in the time of ſleep, cannot be true, becauſe Heat comes outward more in that time, therefore they ſooner ſwear, and therefore if ſleep help Concoction, it is from ſome other Cauſe, for in the time of waking, by reaſon of motion, as we ſhewed the Concoction and Diſtribution of Meat is ſooner made. And if waking they find Crudities, it is from intemperance and eating of what is not fit, which hindereth ſleep. Alſo there muſt be a Natural voiding daily of the Excrements to eaſe the Stomach from them, but too much Evacuation, eſpecially by Venery, as it weakens the whole Body, ſo it doth the Stomach, and troubles of Mind, but recreation is good.

Remedies fit for to cleanse the ſtomach.

Vomiting is good in all fulneſs of the ſtomach, for if it be pained by ſtretching it is preſently eaſed thereby, if it can be which is hard, when it is much dilated, when breath is difficult. Eſpecially vomiting is good, when there is heavineſs from crude flegmack humors; And from weakneſs, in which it is good every month; otherwiſe, if there be no Excrements, it will do hurt, eſpecially if they be unfit, or unacuſtomed to it. And in wind, when there is no other Humor, vomiting is not to be uſed raſhly.

It is cauſed by tickling the Throat and rubbing the Stomach, or by gentle vomits, or ſuch as cleanſe and cure, if there be flegm that is tough. As Oxymels or ſyrup of Sorrel, with warm water, or Decoction of Radiſhes, Beets, Arach ſeeds, Aſarum, and Agarick, or ſtilled water of Nuts and Radiſhes. In weakneſs we add hot and bitter things, and that Cut, As wormwood Wine before, or Syrup thereof with waters, or Decoctions mentioned.

In all theſe Cauſes, belching is good, to take off the ſwelling and the Cauſe, if nothing but wind.

It comes of it ſelf after meat, by bending, we may willingly hold, but not ſend out a bulch. For they which make ſuch a noiſe like belching, do not break wind forth, but Air, that they firſt ſuckt in, and which they ſend from the Gullet, not the ſtomach.

And it is Cauſed by Fomentations and hot things actually and potentially, ſo as follow.

Clyſters do well, when the Stomach is burdned with Meat or Humors, or ſtretcht with wind to ſtir up nature and open the lower parts and empty the Guts. And in weakneſs of the ſtomach, if the belly be bound, they may be ſomtimes given, eſpecially if they work but little and are not Compounded. Of ſtrong things, which are forbidden in weakneſs of the Stomach.

But we may uſe ſharp Clyſters to draw down, and ſuch to expell wind, if it come from them, ſuch as ſhall be preſcribed in the colick.

If the ſtomach be deſturbed by crude humors, or flegm, or wind from them, or from weakneſs, it is good to purge often, but with gentle things, that we offend not the ſtomach. Yet in neceſſity, we uſe ſtrong purges, with correctors for ſuch things as offend the ſtomach; and ſtrengthenres. The forms whereof, we ſhall mention in relation only to thoſe diſeaſes of the ſtomach, which we have declared. Becauſe there are purgers in general for the ſtomach, in other diſeaſes mentioned here and there.

Pills are thought beſt for the ſtomach, by reaſon of the Aloes that is in them, which is thought the beſt purger for the ſtomach (though it ſtinketh and cauſeth loathing) and by reaſon of its bitterneſs and unpleaſantneſs, can be very ill taken. This Aloes is a thick juyce, as it is brought to us, and the redder it is, the better it is, that is, if it be of a redlike yellow, and it is called *Aloes Cuccotrine*, or rather *Succocitrine*, from its Citron color. And when it is hollowed within like a Liver and Brittle, it is called *Aloes Hepatica*. But it may be made better by præparation, when it is poudered and waſht from its filth, by which means it is never the leſs operative in purging (though it be commonly thought otherwiſe) But it is ſtronger when it is poudered and infuſed in convenient liquor, and diſſolved by ſteeping, and then juyce that ſwims at the top poured of from the reſidents, often, and then brought into a Body: If this liquor be Wine or ſpirit thereof, or other ſpiced Drink or Decoction, it will warm and ſtrengthen the ſtomach the more: and if it be done in wormwood Wine, the cleanſing and looſning vertue will be the greater.

I am very much pleaſed with *Aloe roſate* with *Rhubarb*, thus made: Take *the pureſt ſuccotrine Aloes three ounces*, waſht it nine times in the *juyce of Damask Roſes*, and dry it as often, then add *the pouder of red Roſes three drams, Rhubarb a dram, and of the extract of Rhubarb half an ounce, Spicknard a ſcruple, with ſyrup of Wormwood*: make a maſs for Pills,

Alſo the eſſence of Aloes is thus make: Take *Aloes ſuccotrine three pound or four*, pouder it, and put it into a glaſs, with *Sorrel water five fingers above it*, put it in *Balneo two or three daies*, then pour off the Tincture, which is reddiſh, and add again *Sorrel water*, but not ſo much, and put it in *Balneo* again, and pour of the tincture, do this till the water will take no more tincture, ſtill all theſe tinctures in *Balneo*, till there remain in the bottom a matter like Honey, ſhining and reddiſh, let this be mixed by degrees with juyce of Roſes and dryed ſo often, till three pints of the juyce be conſumed. Keep this eſſence.

Of this preperation, we give a dram or half a dram, as often as we pleaſe, when we will gently looſen, and not hurt, but help the concoction.

With other juyces, they are made ſtronger and better for the ſtomach. Let Aloes be finely poudered and ſprinkled with juyce of Roſes and dryed, and then poudered again, and ſo thrice ordered, it will leſs heat, this is called *Aloes roſata*.

If it be done with juyce of Wormwood, it is better for the ſtomach, inſtead of which you may uſe thick juyce of wormwood, which they call the extract with the Aloes.

You may add other alterers to Aloes, to make it work to your purpoſe: as when we will heat the ſtomach, ſpices: when we will ſtrengthen, Maſtick, Roſes, Spike: when we will cleanſe more, Aſarum and Myrrh: when we will concoct, Saffron and the like: as in the Pills of Hiera ſimple and Alephanginæ called Aromatical, from the plenty of Aloes; which we uſe chiefly in a looſe and weak ſtomach, and are called ſtomach Pills, and the Pills called *Aſajereth*, which have Myrobalans in them.

And we may add to it other purgers, when the ſtomach is very foul, but they muſt not be enemies to the ſtomach. Thus are the Pills to be taken before meat made, with Rhubarb and Aloes, called *Aggregative the leſſer* of *Meſue*, and Pills of Rhubarb and Agrimony proper for the Liver, or thoſe of Maſtich, made with Agarick, or thoſe mixed of both called *de Tribus* and imperial, which have Senna; or thoſe which have Turbith called the Stomach pills of Turbith. Theſe Pills are uſed divers waies, by themſelves or mixed.

Theſe we ſharpen with ſtronger, when we will have them work more, and rather with thoſe that have Scammony, then that which is more offenſive to the Stomach.

In immitation of all which we may make new ſtomach Pills thus, only to purge the Stomach from Excrements, with Correcters, which help them, rather then alterers, which may be given better without purging.

In a cold Cauſe, the moſt gentle, are theſe: Take *Aloes prepared or extracted, with Wine Simple or Compound*, as we ſhewed, *half an ounce, Cloves, Nutmeg or Mace, each half a dram*; *Pepper, or Ginger a ſcruple*, if the Head-ake not, elſe *half a ſcruple, with ſyrup of Mints*: make Pills, give *a dram* two hours afore Supper.

That

That they may work in *half a dram*, make them thus with Oyls: Take *Aloes prepared*, as was said, *half an ounce, half a dram of Oyl of Nutmegs*, by expreſſion, of the diſtilled *Oyls of Marjoram, Mints or Cinnamon, each three or four drops, with ſyrup*, make Pills.

Or thus, to purge and ſtrengthen: Take *Aloes prepared with Wormwood juyce half an ounce, Maſtick, Galangal, each half a dram; red Roſes, Spike, each a ſcruple; with ſyrup of Wormwood*, make Pills.

When we will Purge more: Take *Aloes prepared with juyce of Roſes half an ounce, Myrrh, Aſarum, of each half a dram; Ginger a ſcruple, with Honey of Roſes*, make a Maſs.

Theſe are more purging: Take *Aloes prepared half an ounce, Rhubarb and yellow Myrobalans powdered and ſprinkled with Wine, each a dram; Maſtick half a dram, Cloves, Spike, each a ſcruple; with the juyce of Wormwood*: make Pills, give *a dram or more*.

They are yet ſtronger, thus: Take *choiſe or prepared Aloes half an ounce, Rhubarb and Agarick, each a dram; Myrobalons, Chebs and Indian prepared*, as aboveſaid, *each half a dram; Ginger and Cardamoms, each a ſcruple; Spike half a ſcruple, with ſyrup of Roſes*, make Pills.

They will Purge more yet, if to any of the former receits, you add *half a dram of Scammony prepared with juyce of Quinces*, or otherwiſe that it may not hurt the ſtomach, *or two drams of Turbith* rectified.

When we will purge the ſtomach, a Phyſick wine is convenient, becauſe the Wine makes the Medicines pleaſant, which are generaly unſavory, and if Wormwood be added, it will purge Choler and Flegm the better and take away the ſcent, and the ſtomach, will be leſs troubled, becauſe wine is a ſtrengthener: Eſpecially if we will purge ſtrongly, Wine is better then Pills, in which we can not put gentle things, by reaſon of the ſmal quantity.

In cold humors and wind, thus we purge, Take *Agarick or Mechoacan two or three drams, Senna ſix drams, dryed wormwood three drams, Marjoram two drams, Mints a dram, Fennel ſeed a dram and an half, Ginger a dram*, bruiſe and infuſe them in three pints of *Sack*, for three draughts.

In a looſe and weak ſtomach, that is flegmatick, thus: Take *Rhubarb two drams, Myrobalans, Citron and Chebs, each a dram and an half; Senna an ounce, dryed Citron peels three drams, Galangal two drams, wormwood three drams, red Roſes a pugil, Maſtick two drams, Spike half a dram*, beat and infuſe them as formerly.

When you will cleanſe and purge more: Take *Senna an ounce and half, Turbith two drams, Agarick three drams, Rhubarb two drams, Tartar an ounce, Aſaram a dram, wormwood half an ounce, Marjoram two drams, Mints a dram, Galangal and Calamus, each a dram and an half; Fennel ſeed two drams, Ginger a dram, Spike half a dram*, bruiſe them for four pints of Wine for four Doſes.

Of Electuaries that called *Hiera* of *Galen*, made only of Aloes that purgeth, and called *Picra*, becauſe of its bitterneſs, is chiefeſt, but ill to be taken: becauſe they muſt take an ounce to move the Belly, but *Rhaſis* prepares it without Saffron.

It may be thus made pleaſanter: Take *wormwood a handful, red Roſes a pugil, Schænanth three drams, Cubebs, Carpobalſom, each two drams; Fennel ſeed and Siler mountaine, each a dram*; infuſe them in a quart of *wine* and *water*: boyl them a little, and ſtrain them, then add *Honey or ſugar a pound*, boyl and ſcum it, til be like a Syrup; then add *ſix ounces, of fine Aloes, Maſtick two drams, Cinnamon half an ounce, Aſarum roots two drams, Spike a dram, Saffron half a dram*, make an Electuary: you may give *half an ounce*, ſomtimes more and ſomtimes leſs. And if you add *two or three ounces of Senna*, to the infuſion, it will purge more.

If there be obſtructions, make it thus: Take *Liquoriſh an ounce, Fumitory, Harts-tongue or Ceterach, each a handful; Agrimony half a handful, Cordial flowers a pugil, Raiſons four ounces, Polypody an ounce, Senna ſix drams*, boyl them in *Fennel and Annis ſeed water*, and add to the ſtraining *Aloes five ounces*, ſtrain and boyl them to an Electuary, and add *Maſtick a dram, Frankincenſe a dram and an half, or two or three ounces of ſenna*, to make it purge better.

Or if you add *Hiera Galeni*, whoſe corrector is *Agarick or Rhubarb* corrected by *Spike*, it will be nimbler and work in a leſs quantity, which is very acceptable, and the better with *Scamony prepared*. It is not good for the ſtomach, to give *Coloquintida*.

There are other purging Electuaries, not ſo bitter, ſtronger or weaker, here and there mentioned, that leſs hurt the Stomach, as the Lenitive Electuary, *Diacatholicon, Diaphœnicon*, of the *juyce of Roſes*, and the like.

Diaſpoliticum deſcribed by *Galen*, is an Electuary, made of *Salt peter*, to purge the ſtomach from flegm and wind and to cleanſe.

A pleaſant and powerful Conſerve, is thus made: Take *Agarick half an ounce, Rhubarb an ounce and an half, Senna four ounces, Cinnamon half an ounce, Ginger a dram*, infuſe them in four pints of *wine* and a pint of *juyce of Quinces*, boyl them a little, then ſtrain them adding *pulp of Quinces and Sugar, each a quarter of a pound*, boyl them to an Electuary, give *two or three drams*, if you will have it ſtronger, that a leſs quantity may ſerve, add *the extract of Scammony*, which will not hurt the Stomach.

A good Pouder to purge the Stomach, though bitter: Take *Agarick and Rhubarb, each a dram and an half; Turbith four ſcruples, Tartar a dram, Ginger half a dram, Spike a ſcruple, Gentian, Zedoary, each half a dram; wormwood a dram and an half, tops of Centaury and Fennel ſeed, each a dram*; make a Pouder, give *two dragms with wine* and a little *Aloes*, if the Patient will endure the bitterneſs. If it be quickned with *Diagredium*, it will work better and in a leſs qnantity.

You may with Sugar diſſolved in Wormwood, or Mints, or Cinnamon-water make Lozenges for the ſame.

A Stomach purging Potion. Take *Rhubarb four ſcruples, Spike a ſcruple*, infuſe them in *Wine*, ſtrain and add *ſyrup of Roſes*, with the Infuſion of *Senna an ounce, ſyrup of Wormwood half an ounce*, give it.

Or this Decoction: Take *Galangal half an ounce, Aſarum roots a dram, Wormwood two drams, Mints a dram, Senna half an ounce, Fennel-ſeed a dram*; boyl and infuſe *Rhubarb* and *Agarick* as before.

There are other Purges for the Stomach, here and there mentioned in other Diſeaſes.

Altering remedies againſt the weakneſs of the ſtomach.

All remedies given to the Stomach muſt be accepted of it by propriety and ſtrengthen it, and be hot more or leſs, according to the diverſity of the Cauſe, and fitted againſt the Weakneſs of it through want of Natural heat, or its cold Diſtemper, or againſt its Refrigeration, or for the preparation of Humors, altering or expelling of Wind: And as the Stomach is moiſter or looſer, they muſt aſtringe more or leſs, and if the pain be great, abate it. This is done divers wayes.

Among Drinks, ſweet Wine and old, as Muſcadel. Sack,

Sack, Malmſey, either at meat or otherwiſe, when it is cold, if it be drunk warm.

Alſo they are good when they are ſpiced.

Or made of Herbs, by infuſing or a little boyling, as that of Wormwood is moſt uſual, but unpleaſant to ſome. It muſt be made of ſuch quantity as may give it bitterneſs and good ſcent; it is good in all Diſeaſes of the Stomach from Repletion.

And Mints and Marjoram make it pleaſanter.

Or thus make it: Take *Roots of Maſterwort, Galangal, Zedoary, each three drams; dryed Citron-peels and Wormwood, each half an ounce; Mints, Marjoram, Coriander-ſeed, each two drams; Cloves, Nutmeg, each a dram and half; Maſtick two drams, Wine four pints,* ſteep them if there muſt be greater Cleanſing, as in a foul ſtomach and Obſtructions, add *tops of Centaury a dram and half.* If they hate bitter things, leave out the *Wormwood* and the *Centaury.*

For a windy ſtomach give Fennel, or Aniſe-ſeed, Wine and the like.

Or this: Take *the barke of Fennel-roots, and Roots of Calamus, each half an ounce; Mints, Marjoram, Spondilium, each a handful; Fennel, Caraway, and Seſeli-ſeed, each two drams; Juniper and Bay-berries, each an ounce;* infuſe them in Wine, add *a dram of Cummin-ſeed,* if the ſcent be not diſliked, if they love bitter, ad Wormwood.

Dioſcorides teacheth that Melilot boyled, or infuſed in Wine, is good againſt pains of the ſtomach.

Alſo Wine is made of Infuſion of Spices for the ſtomach, which may be ſweetned and ſtrained.

To make Hippocras ſweetned. Take *Cinnamon an ounce, Sugar a pound, wine four or five or more or leſs pints,* as you will have it more or leſs ſweet, add *Pepper, Ginger and Cardamoms, each half a dram.*

The Wine of *Mountpelier* called *Pimentum,* is thus ſweetned. Take *Cinnamon ſix drams or more, Ginger five drams, Pepper two drams, Cardamoms the great, Cloves, Nutmegs, each a dram; Honey five pints, Wine ten pints,* ſteep and ſtrain them.

A Claret artificial for the ſtomach. Take *Cinnamon an ounce and half, Ginger half an ounce, both Cardamoms, round and long Pepper, each a dram; Nutmegs, Mace, Galangal, Cloves, each a dram and half; Spike, Schenanth, each half a dram; Honey, or Sugar, or both a pound and half, Wine five quarts.*

A ſpoonful or two of the Infuſion of Spirit of Wine, is good. As, Take *Cinnamon an ounce, ſpirit of Wine a pint, Sugar four ounces,* ſet it in the Sun, and add *Roſe-water.*

Or thus: Take *Cinnamon an ounce, Pepper, Ginger, Cloves, each three drams;* infuſe them in *a pint of ſpirit of Wine,* add *a ſpoonful or two of this to, Wine and Sugar,* and it will be excellent againſt the Wind of the Stomach.

Another againſt Pains of the Stomach. Take *Nutmegs two drams, of Wine two ounces,* with *Honey of Roſes* ſweeten it: If it muſt be preſently uſed, boyl it a little, give two or three ſpoonfuls: ſome boyl this till the ſpirit of Wine is gone, and make a Mixture.

Or infuſe Wormwood in Aqua vitæ, and mix ſome drops with Wine.

Or other Stomach-herbs.

Dioſcorides teacheth that the Broath of an old Cock expels Wind.

Or make Broath with Pepper, Ginger, Cloves, Nutmeg, Mace, or the like, with a little Saffron.

Some boyle the ſtones of Bay-berries in Broath, to make it pleaſant, and ſtrong to expel Wind.

Or Herbs, as Marjoram, and other Pot-herbs, as Mints, Hyſop, Savory-Broath; with Wormwood, is commended if it be not diſtaſtful.

If the ſcent may be endured, it is alſo excellent to boyl Chamomil and Melilot-flowers in Chicken-broath.

In a weak and windy Stomach: Take *Caraway-ſeed a dram, whole Pepper ten grains,* boyl them in Broath, with *a ſcruple of Maſtick.*

The only Decoction of *Maſtick* ſtrengthens the ſtomach.

Syrups to prepare afore Purging, when we will cut. Take *ſyrup of Mints, Hyſop or Stœchas, each an ounce; Honey of Roſemary-flowers half an ounce,* with *Mints and ſweet water* make a Julep.

When we will cleanſe alſo. Take *ſyrup of Wormwood and Bettony, each an ounce; Honey of Roſes, and ſyrup of Vinegar, each half an ounce;* with Wormwood-water.

When we deſire moſt to ſtrengthen. Take *ſyrup of Citron-peels, or of Nutmegs, or of Myrobalans an ounce, ſyrup of Mints, or Chamomil half an ounce:* Give it alone, or with *Wine,* or *Wormwood,* or *Marjoram-water,*

A Compound Syrup. Take *Fennel-roots half an ounce, Roots of Maſterwort, Calamus, Zedoary, Citron-peels, each two drams; Mints, Savory, Hyſop, Marjoram, Bettony, Spondylium, Sage, Roſemary and Stœchas-flowers, each a dram; Fennel and Aniſe-ſeed, each three drams; Caraway-ſeed a dram, Schœnanth half a dram,* boyl them in *wine and water,* add *Nutmeg half a dram,* and to the ſtraining of *Sugar ſix ounces,* boyl it to a ſyrup, give *an ounce and half* alone, or in *wine.*

Or, Take *ſyrup of Mints an ounce, ſyrup of Wormwood half an ounce,* drink it with Wine.

Or this to ſtrengthen: Take *juyce of Mints half an ounce, juyce of Wormwood two drams,* give it with *wine.*

Juyce of Chamomil and Melilot, each half an ounce; given with *wine* takes away pain preſently.

Stilled Waters to ſtrengthen and heat the Stomach, are of Wormwood, Mints, Calamints, Marjoram alone, or with Wine, or with other Drinks, or after Electuaries.

Cinnamon-water is refreſhing and healing, if it be made of Wine, with Sugar.

Or ſome drops of ſpirits of Wine or Aqua vitæ, preſently do help a cold flegmatick and foul ſtomach, therfore it is ſo common, and if it be compounded with ſpices tis the better. Or with hot Plants, and then diſtilled.

Some Natural Baths drunk to help the old Weakneſs of the ſtomach, when it comes from too great moiſture or foulneſs, eſpecially thoſe of Niter. *Italians* commend the *Porretan-Spaws,* and Germans have many as good.

Chymical Oyls alſo of Plants and Spices are excellent, but not given alone, but with diſtilled Waters, or Wine a drop or two.

As Oyl of Cinnamon or Cloves, the reſt are not ſo pleaſant, and burn too much.

Or the Oyl of Marjoram, or Mints, or of Aniſe-ſeed and Fennel-ſeed, proper againſt Wind.

Alſo Oyls by expreſſion are good, as of Mace, and Nutmegs, and inflame leſs, if taken with Broath.

Or Oyl of *Palma Chriſti,* and baſtard Saffron, expels Wind.

Theſe are given in ſubſtance, Mints, Calamints, Greek Mints, Sage, wild Mints, Spikenard, Lavender, Tanſey, Goats-organ, Penny-royal-ſeed, and Root of Lovage. Alſo Roots of wild Parſley, and ſweet Cane to expel wind, according to *Dioſcorides.*

Alſo Roots of Maſterwort, Zedoary, Galangal, Calamus, Ginger, are drunk in pains of the ſtomach, and Rhapontick by *Dioſcorides.* Or Bithwort againſt the pains of ſtomach and guts.

Onyons eaten, take away the pain, and Piſtacha's and Rocket, help Concoction. Alſo Pears and Quinces.

Or,

Or Mints fryed with Eggs. And Wormwood ſo fryed, is uſed at great mens tables, where I have been, they ſeem not ſo bitter to ſome whoſe ſtomachs delight therein.

Alſo Aniſe-ſeed, Caraway and Fennel, expel wind, and help Concoction.

Or ſeven or nine corns of Pepper whole, that they may not burn the mouth given with Wine, do quickly help a cold ſtomach, and alſo Ginger.

Or a dram of Pepper wrapt in a wafer wet in Wine, and three ounces of Wine after it.

Galen gives Pepper with wine preſently after Meat, if it turn to Flegm, and the Patient be cold, with ſhort Breath and weak Pulſe. This caſe *Barus* deſcribeth, and ſaith it is rare, but it is all one with Cardiaca.

Nutmeg helps Concoction, and the Pouder given with Chamomil-water takes away pain of the ſtomach.

Alſo Cloves alone, or in Meats, with Cinnamon, and the like; Cubebs are highly commended againſt wind, and Galangal chewed, breaks the wind, as they ſay.

Or Maſtich ſwallowed whole, or in pouder a dram, or ſome grains often taken to ſtrengthen.

And Gum of Ivy ſo taken, is excellent againſt pains of the ſtomach. And Labdanum, and Caſtor, with Wine, and the poliſhing Stone.

There are divers compound Pouders for the ſame called *Species*, to be given as Meat or Medicine alone, or mixed.

When we will heat much, we chooſe the Burners, if pleaſant, as the Peppers, Ginger, Cardamoms, or the leſs pleaſant, when there is much Flegm, as Zedoary, Cubebs, Pellitory-roots. When we will ſtrengthen and bind, or aſtringe the looſe ſtomach, we give leſs ſharp, but ſweet things, as Nutmeg, Mace, Cloves, Galangal, Calamus, Cypreſs; or ſweet things, as cinnamon, caſſia, or ſweet cane, wood-aloes, yellow Sanders, Spikenard, Schænanth, with Saffron concoct. Of hot ſeeds theſe help concoction, and chiefly expel wind; as the Aniſe-ſeeds, Fennel, Caraway, Cummin, Smallage, Parſley, Ameos, ſeſely, or wild Parſley-ſeed. Of Herbs, ſweet and pleaſant, Thyme, Calamints, Lovage, Mints, Marjoram, Savory, with the Roots of Elicampane, and Citron-peels. And when we will ſtrengthen, they add red Roſes often, ſeldom Maſtich. And to theſe ſpecies, Liquoriſh is added to cleanſe, and Aſarum that is ſweet, but in a ſmall quantity, leaſt it turn the ſtomach, and *Galen* mixeth Niter. In ſome compound Pouders they put Musk and Ambergreeſe for the Heart, but ſome love not the ſcent of it.

Of theſe divers Pouders are made, ſome are for Meat and Broath to make them pleaſant, as Cooks do.

Theſe following are ſold ready prepared for the cooks in *Germany*. Take *Ginger two ounces and half, Pepper an ounce, Nutmeg, Cinnamon, each two drams; Saffron three drams*, this is called the *Aromatical ſaffron pouder*.

Another more pleaſant. Take *Ginger four ounces, grains of Paradiſe half an ounce, Pepper two drams, Nutmegs, Cloves, each half an ounce; Galangal two drams, Cinnamon two ounces*, make a Pouder; this is uſed alone, or with *ſix drams of ſaffron*.

A more pleaſant pouder is thus made. Take *Cinnamon four ounces, Ginger an ounce and half, Cloves an ounce, Pepper half an ounce, Saffron two drams*.

A ſweet pouder for meat. Take *Cinnamon two drams, Ginger three drams, Cardamoms the greater, Pepper and Nutmeg, each a dram; Sugar two pound*.

You may alſo mix the other ſpecies or pouders with ſugar.

There is alſo a Salt compounded to ſeaſon Meat for moiſt and looſe ſtomachs. Thus, Take *ſalt parched an ounce, Galangal a dram, Cinnamon two drams, the Aſhes of Hens guts half a dram*.

Salt and Caraway-ſeed with a rear Eg, helps concoction, and keeps the Eg from corruption.

Pouders to heat and ſtrengthen the ſtomach, and expel wind and crudities, and cleanſe flegm and filth, are made af the aforeſeid mixed, to be taken alone, or with Broath, Wine, Waters, Juyces, Decoctions, with, or without ſugar; ſomtimes with eight times as much ſugar if they be unpleaſant, and Lozenges or Electuaries. We ſhall ſhew Examples of ſtomach-pouders.

Of Aromaticks alone to heat, we make pouders, the firſt: Take *round Pepper a dram, long Pepper half a dram, Ginger half an ounce, great Cardamoms, Nutmeg, Mace, cloves and Galangal, each a dram; Cinnamon half an ounce*.

The ſecond is more compound by adding to the former, *the leſſer Cardamoms, Zedoary, Wood-aloes, or yellow Sanders, Spike, each half a dram; Cubebs, ſaffron, each a ſcruple*.

The third: Take *Cinnamon an ounce, Ginger half an ounce, great cardamoms half a dram, round Pepper a ſcruple, Nutmeg, Mace, Galangal, each two drams; cloves three drams*.

Of this Pouder with ſugar a pound, you may make Lozenges; ſome leave out the Pepper and cardamoms; ſome add cubebs, and alter proportions.

Or we may uſe the ſpecies Diacinamomi of *Meſue*, which hath beſides the other Wood-aloes, Saffron, Elicampane, and Musk.

A fourth leſs healing and more ſtrengthning. Take *calamints, Mints, Marjoram, Thyme, ſavory, each a dram; Liquoriſh a dram and half, Roots of Maſterwort, Elicampane, and Pellitory in flegmatick perſons, each half a dram; Aſarum-roots, dryed Citron-peels, each a ſcruple*; with *red Roſes two drams*, make a pouder.

A fift Pouder of ſeeds to expel wind. Take *coriander-ſeed, Aniſe-ſeed, each half an ounce; caraway two drams, cummin,* (if it be not offenſive) *Ameos, ſeſely, ſiler-mountain, Lovage-ſeeds, each half a dram*.

The ſixth very hot: Take *round and long Pepper, each half an ounce; Ginger a dram, Fennel, and Aniſe-ſeeds, and tops of Thyme, each half a dram*; make a pouder.

Or uſe Diatrionpipereon which is hotter, if it be *Galens*; or that of *Meſue* which hath alſo caſſia-wood, Spike, Smallage and Ameos ſeeds, roots of Aſarum and Elicampane.

Or uſe the ſpecies of the Electuary of ſpices, made by *Galen*.

Or the *Diaſpoliticon* of *Galen*, which cutteth flegm beſt, it is made of Pepper, Niter, Cummin and Rue.

The ſeventh, not ſo hot as the firſt: Take *Calamints or Mints, Marjoram, Time, Lovage ſeed and of ſiler mountain, each a dram; Pepper and Ginger, each half a dram; Cinnamon a dram and an half*: make a Pouder.

Diacalamintha of *Galen* or *Meſue*, doth the ſame thing.

The eight Pouder, which is alſo a ſtrengthner of the Stomach: Take *red Roſes an ounce, Cinnamon half an ounce, Cloves three drams, Nutmeg, Mace, each two drams; Galangal a dram, long Pepper, great Cardamoms and wood Aloes, each half a dram, Zedoary and Spike, each a ſcruple; Liquoriſh two drams*: make a Pouder.

The Aromatical ſpecies of *Gabriel*, ſo much uſed is like this, it is prepared with and without *Musk*, and the *Aromaticum Roſatum* of *Meſue*, to which is added *Cubebs, Troches of Diarrhodon* and *Gallia Moſchata*. And

the *species Rosata Novella* of *Nicolas*, which hath *Storax*, and the species of the Electuary of *Citrons* made by *Mesue*, and that of *Musk*.

The ninth Pouder for the same: Take *Galangal six drams, Calamus, Cloves, Cinnamon, Mace, each two drams; Ginger, both Peppers, great Cardamoms, each half a dram; Spike, wood Aloes, of each a scruple; Fennel, Carva, Annis seeds, dryed Mints and Marjoram, each two scruples*: make a Pouder.

Or instead thereof, use *species Diagalangæ* of *Mesue*, which hath *Lovage* and *Calaminst* also.

The tenth is stronger yet: Take *Cummin prepared with Vinegar, or Annis seeds, or both, an ounce. Fennel and Carua seeds, each two drams; Amcos, siler mountain, Calaminst or Mints, Marjoram, Savory, Time, Lovage, red Roses, of each a dram; Citron peels dryed, Masterwort or Zedoary roots and Pellitory, each half a dram; Liquorish, Nutmeg, Mace, Cloves, Galangal, Cinnamon, each a dram; Pepper, Ginger, great Cardamoms, Cubebs, Schænanth, each half a dram; Spike and Saffron, each a scruple*; make a Pouder.

Or instead thereof, give *species Dianisi* of *Mesue*, which hath *Mastick*, *Diacuminis* of *Nicholas*, or the species of the Electuary of seeds.

There are also other species, as that *Diazingiber* of *Nicholas*, which have spices and other seeds, Roses and Liquorish, also Rhubarb and Pistaches and pine Nuts.

Also *Diaxylaloes* of *Mesue*, which is also cordial, and besides many spices, hath Roses, Mastick, Bean roots, Rawsilk, Pearl, Currans, Amber, Citron leaves, Basil, Balm, Gallia-Moschata, Musk and Amber greese.

Also Pleres-Archonticon, is good for the stomach, like Diaxyloaloes and hath Camphire in it.

Also the species of the Electuarium Ducis of *Nicolas*, is good against crudities and Excrements and wind that breeds from them: and is a proper Medicine against the stone and colick.

The species called *Diarhodon*, is not given alone to cold stomachs, but mixed with others.

There are besides these, bitter pouders to be taken, a spoonful at a time in Wine, as that of Wormwood and centaury in a cholerick cause.

Or this: Take *roots of Masterwort, Birthwort, each a dram and an half; Wormwood, Centaury, each a dram; cummin, caraway, Ginger, each a scruple; saffron five grains*, make a Pouder; or add *half a scruple of castor* and make Pills *with syrup of Wormwood*, give *a dram*.

Of proper astringents, we make Pouders to be taken after meat, that the stomach may better imbrace and concoct them, and to hinder the breeding of wind, these are not too hot, least they digest too soon.

As: Take *coriander seed prepared half an ounce, Fennel and Annis seed, each two drams; caraway seed a dram, cinnamon two drams, calamus, Galangal, citron peels dryed, each a dram; red Roses half a dram, with sugar* as much as all, make a Pouder to be taken after meat.

In the loosnes and moistnes of the stomach, we add greater astringents and dryers: As, Take *Cinnamon half an ounce, sweet cassia two drams, roots of Galangal and cypress, each a dram and an half; dryed citron peels half a dram, dryed Quinces, red Roses, each a dram; Antispodium of Ivory, burnt Harts-horne, Hens guts burnt, of each half a dram, red Coral a dram, (or a dram of Diacydonium without species) with sugar of Roses* as much as all the rest, make a Pouder for after meat, to astringe the stomach. with Frankincense and Mastick it is better.

Gross Pouders to be chewed are divers, these are also given afore meat: and to astringe and help concoction after meat.

They are pleasant: As, Take *Annis seeds an ounce, sweet Fennel seed an ounce, Coriander seeds three drams, Caraway seed two drams, Liquorish three drams, Cinnamon half an ounce*, make a gross Pouder.

It will be sweeter, with *Nutmeg, Mace, cloves and Ginger, each half a dram.*

There is a Compound Pouder of this sort, called *Priests Pasture*, thus made: Take *Ginger half an ounce, Nutmeg, cinnamon, each three drams; Galangal, calamus, cloves, of each two drams; great cardomoms a dram and an half, coriander, Fennel and Annis seeds, each half an ounce; caraway seeds two drams, Liquorish two ounces and an half*, to these they add *comfits of seeds and sugar, or sugar.*

Also Lozenges may be made of the ten Kinds of pouders mentioned, as of *Diacinamomum, Diatrionpiperon, Diacalamintha, Aromaticum rosatum, Novella, Diagalanga, Diamsum, Diacuminum, Diazingiber, Diaxylaloes, Pleres-Archonticon, Electuarium Ducis.*

Or you may make the Gross pouders, as that called *Priests-pasture*, into Tablets, adding *an ounce of sugar to a dram of the species, boyling the sugar with a little Rose water.*

Or thus, when we will heat much: Take *of the first, second or third Pouder, or Diacinamomum, a dram; of the sixth or seventh Pouder, or of Diatrionpiperon, or Diacalamintha half a dram, Ginger candied a dram, Oyl of Marjoram two drops with sugar* dissolved in *calaminst water*: make Lozenges.

To strengthen the Stomach: Take *of the eight Pouder, or of Aromaticum rosatum a dram. of the ninth Pouder, or Diagalanga half a dram, candied Citron peels, or conserve of Roses a dram, Oyl of Cinnamon four drops with Sugar* dissolved in *Mint water*: make Lozenges.

In a windy stomach: Take *of the tenth Pouder, or Dianisum a dram, Diacuminum half a dram, conserve of Mints, or of Marjoram a dram, with some drops of Oyl of Annis seeds and Fennel seeds and Sugar* dissolved in *Fennel water*; make Lozenges.

You may make also many sorts of Lozenges, of Spices or Plants with conserves or Oyls.

Also of some drops of Oyl of Annis seeds, Fennel, Caraway, Marjoram, Cinnamon, Cloves, with boyled Sugar, these are pleasant, if the Oyl be not added to the Sugar while it is hot, and so fly away.

Also there are conserves and candies, both dry and also moist, made of Sugar and Honey. And these conserves are most usual: conserves of Rosemary flowers, Mints, Marjoram, Stœchas, and of Eryngus, according to *Rondeletius* and *Dioscorides* saith, that the conserve of Bettony made with Honey helps concoction, or of Squils.

Also candied Ginger, or the Pouder of Ginger, boyled with Honey two drops, or Icikles. Also Calamus candyed, or Nutmegs, Myrobalans, Citron peels, or Wallnuts with Spices prepared, as commonly they are.

Of these, some are given alone, or mixed with others, or in forms of Electuaries or Tablets.

Also the confection of wisemen so called, is good, Take *Calamus candied ten ounces, sweet Almonds blanched and Pine-nuts nine ounces, Pistachoes three ounces, candied Eryngus nine ounces, the three Peppers, each three drams; Ginger, red Roses, Cardamoms, Mace, Nutmegs, Galangal, each six drams; Aromaticum rosatum half an ounce, red Sanders an ounce, clarified Sugar twelve pound*, make a Confection.

Also dryed candied simples with Sugar, as Cinnamon, Cloves, Ginger, Zedoary, Galangal, Calamus, Citron

Citron peels, cut in pieces and hardned with Sugar, also Roſes and Marjoram, which by ſome are ingeniouſly confected with Sugar. Eſpecially ſeeds to diſcuſs wind, before and after meat, as comfits of Coriander, Annis ſeeds, Fennel and Caraway ſeeds, and candied Quinces with theſe ſeeds ſticking in them, are good.

You may make divers Electuaries of the tenth Pouder mentioned, or the uſual Species with Honey or Sugar, boyled to a ſyrup, or ſyrup of Mints, Quinces, or of candied Ginger, or citron peels, or of pulp of Quinces.

Such did the ancients make up of Species or Pouders with Honey ſcummed into ſoft Electuaries, rather then otherwiſe. And the ſpiced conſerve of Quinces, by *Nicholas* was made up with Pouders.

With Fruits and Roots, as *Confection Diacydonites*, which is made of Quinces, conſerved and Pouders.

The moderne Authors uſe the Electuary of calamus, it is made of calamus, boyled in wine with Honey and ſpices. The roots of Acorns do as well, for they aſtringe.

There is alſo an Electuary called the Electuary of Sea Radiſh, made with honey and ſpices of Horſradiſh and Gentian.

From the divers mixtures of all theſe, you may make divers Electuaries, and add to them conſerves and candyes, and the like.

As when you will heat: Take *the Electuary of the three Peppers, or the Lozenges thereof an ounce, or a dram of the ſpecies, conſerve of Mints, Marjoram, each an ounce; candyed Ginger half an ounce, with ſyrup of Stœchas*: make a mixture.

When you will ſtrengthen: Take *the Electuary of Aromaticum roſatum, or Diagalanga, or both, or the Tablets* made of them *an ounce, or the ſpecies of them, or our pouders a dram, conſerve of old Roſes, Citron peels candyed, Calamus candyed, each half an ounce; with ſyrup of Quinces*: make an Electuary.

When you will chiefly expel wind: Take *the Electuary Dianiſum, or Diacuminum, or Tablet, or Species, or our Pouders of the ſame*, in the weight mentioned, and add *conſerve of Roſes, Calamint, candyed Nutmegs, of each half an ounce; with ſyrup of Mints.*

In looſe and moiſt Stomachs, give dryers and binders: As, Take *Quinces candyed an ounce and an half, citron peels candyed an ounce, candyed Ginger half an ounce, one Emblick Myrobalan, of Diacydonites without the ſpecies made of burnt Ivory and aſtringents half an ounce, Aromaticum roſatum, red Coral, each a dram; Aſhes of Hens guts, Antiſpodium of Quinces and Ivory, or ſhavings of Ivory, each half a dram; with ſyrup of Quinces*: make an Electuary, take after meat as much as a Nut.

There are alſo dry mixtures: As, Take *candyed Quinces half an ounce, conſerve of Roſes three drams, conſerve of Marjoram, Ginger candyed, each two drams; Aromaticum roſatum a dram, Cinnamon two drams, Cloves, Nutmeg, each a dram; with Sugar of Roſes*; make a mixture, give it in the mornings, or add *Coriander, Annis or Fennel ſeed Comfits.*

After meat to aſtringe the ſtomach, we uſe theſe mixtures without the hot Spices: thus, Take *candyed Quinces three drams, conſerve of Roſes and Citron peels candyed, each two drams; Cinnamon a dram and an half, the pouder of Diacydonium without ſpecies a dram, red Coral half a dram, Coriander ſeeds two drams, Annis and Fennel ſeed, of each a dram; red Roſes and Marjoram, each half a dram; with Sugar or Seed Comfits*: make a mixture.

Some Opiats take away pain of the Stomach from a cold cauſe, for Opium doth not cool, as ſome think, but rather heat by reaſon of many ingredients with the Opium in Opiats, as we ſhewed often.

Therefore in pain of the ſtomach, give *Treacle, Mithridate, Aſyncriton, or Philonium from a dram to a dram and an half*, alone or with other things, and give *Wine* upon it to help the operation; or other Narcoticks with Spices.

Or this, *Treacle with Citrons*: Take *candyed citron peels half a pound, old Treacle or Mithridate, each ſix drams; Smaragdi prepared half a ſcruple, Electuary of Gems two ſcruples, ſealed Earth a dram; with ſyrup of citrons*, make an Electuary.

Some mix purgers with them; as *Philonium* with *Diaphœnicon*, when the ſtomach is pained from the Excrements.

Remedies to be applied to alter the weakneſs of the ſtomach.

Outwardly we anoynt or foment or Plaiſter the ſtomach to heat it and expel wind, when it is ſtretched, or to aſtringe, when it is weak or looſe, they muſt be proper and applied actually hot

You muſt anoynt on the left ſide, where the lodg of the heart is before, but behind right againſt ſtomach, upon the ſpondils of the Back towards the left ſide, and ſprinkle the Pouder following thereon.

When you will heat, uſe Oyl of Mints, Spike, Jeſamin, Elder, or that of Nutmegs by expreſſion, or of Mace which are pleaſant, or the diſtiled Oyl of Spike, Mints, Cloves, and the like, when you will expel wind uſe Oyl of Rue and Bayberries, or the diſtil'd Oyl of Juniper berries in a ſmal quantity with the reſt, or that of Fennel, Caraway, Cummin ſeed by drops with other; when you will ſtrengthen, uſe Oyl of Maſtich, of Wormwood: when you will aſtringe uſe Oyl of Maſtich, Myrtles, Roſes, Quinces, and that made of preſſed Grape ſeeds.

When pain is to be abated, uſe Oyl of Chamomil, Spike or Dill; which is good after pain from glutony. Or uſe Oyl of Herbs boyled.

To heat, expel wind, and ſtrengthen: Take *Maſtick ſix drams, Calamus, Galangal, cypreſs, each half an ounce; Nutmegs, cloves, each three drams; Fennel and Angelica ſeeds, of each two drams: with two ounce of Sack and Oyl*, put them in a hot place, or boyl them a little.

When you will ſtrengthen more: Take *Wormwood, Mints, each two drams; Sage, Roſemary, Lavender, of each an ounce and an half; red Roſes three drams*, cut them ſmall; add *Maſtick an ounce, red wine four ounces, Oyl of Nuts* three fingers above them; boyl and ſtrain them.

This is beſt againſt wind: Take *cummin, caraway, Lovage, Fennel ſeed, each two drams; Bay and Juniper berries, each half an ounce; Rue, Lovage, Mints, Bates, each three drams*; beat them and add *Aqua vitæ two ounces and with Oyl Olive or of Nuts*; boyl as aforeſaid.

Of the oyls mentioned, you may make ſtomach Oyntments with ſpices, or the like: when you will chiefly heat: Take *Oyl of Mints, Spike, of each an ounce and an half; Oyl of Wormwood half an ounce, Oyl of Spike, ſome drops of cloves, Nutmegs or Mace, each a dram; of wood Aloes and Sanders, half a dram, dryed Mints, Marjoram, Roſemary or Schœnanth, each two ſcruples; with Wax*, make an Oyntment.

The ſame is good againſt wind; with *Oyl of Rue or Bayes half an ounce, or ſome drops of diſtil'd Oyls, as that of juniper berries.*

This

This is good in both cases: Take *Oyl of Nutmegs by expression, of Mace or both two drams, Oyl of Cloves three drops, of Anise-seeds six drops, Gallia moschata half a dram,* with *Wax* make an Oyntment; we may add Musk, or Ambergrease, or Oyl of Cinnamon, or Hiera picra.

To dry and astringe a moist and dry Stomach. Take *Oyl of Myrtles, Mastick, Quinces, each an ounce and half; Oyl of Wormwood half an ounce, Galangal, Snakeweed, Citron-peels, each a dram; Roses, wild Vine, Pomegranate-flowers, each two scruples; Hypocistis, Labdanum, each half a dram; Mastick, Frankincense, coral, each a dram; and Bole,* and a little with *wax* make an Oyntment, adding *Allum* and *Vinegar.*

If there be pain; Take *Oyntment of Marsh-mallows an ounce, Mastick two drams, Oyl of Dill or Chamomil, each half an ounce; Seeds and Mints, each a dram;* with *wax* make an Oyntment.

Cerots or Plaisters made like a Scutchion are lasting, they are made of the Oyntments mentioned, with more Wax for a Cerot, and Rosin for a Plaister.

Galens Cerot for the Stomach is good, made of Roses, Wormwood, Spike, Mastich, Oyl of Roses and Wax.

Or this instead of it: Take *long Birthwort, Calamus, each half an ounce; mints, wormwood, red Roses, each three drams; Spike two drams, mastick six drams,* with *Oyl of Spike, and mastick and wax* make a Cerot.

Or this Stomach-plaister: Take *mastick an ounce and half, Frankincense and Labdanum, each an ounce; Storax half an ounce, Aloes two drams* (except there be pain) *Coral two drams, Galangal, mints, marjoram, wormwood, red Roses each a dram; Cloves, Spike, Sanders, each half a dram,* with *Oyl of Spike, mints and Rosin, and Pitch and Wax* make a Plaister.

When the stomach is loose, use Emplaster of Mastich. This is best corrected. Take *Mastich two ounces, Frankincense an ounce, Storax and half Labdanum, each an ounce: Hypocistis, Acacia, each three drams; Gallia or Alipta moschata a dram, cypress-roots and wormwood three drams, Mints, Marjoram, Rosemary, Myrtles, each two drams; red Roses half an ounce, seeds of coriander, cummin, Bar-berries, sumach, each three drams; cloves two drams, sanders, wood-aloes, schænanth, spike, each a dram; Bole, coral, each half an ounce;* with *Oyl of Mastich, and spike, Pitch, Rosin, wax and Turpentine* make a Plaister.

If there be Wind, use Emplaster of Bay-berries, Mastich, Frankincense, Myrrh, Cypress and Costus, with Honey.

Or this against wind, and to fix the stomach. Take *Bay-berries an ounce and half, Juniper-berries half an ounce, caraway, cummin and Ameos-seeds, each two drams; Mints, Rue, each a dram; cypress, costus or Masterwort-roots, each half an ounce; Zedoary two drams, Mastich, Frankincense, each six drams; Aloes, Myrrh, each two drams; or two of Hiera picra,* with *Honey and Turpentine* make a plaister, with Nard-oyl, and chymical Oyl of Seeds a little.

Hiera picra with Honey makes also a good Plaister for the weak stomach.

Cataplasms without Oyl (which are unpleasant) are better, but sooner dry, therefore must be repeated.

Wormwood, Mints, Sage beaten and heated are good to be applied also, or laid upon a hot tyle, and sprinkled with wine, and then applied. Or if they be dry, cut and poudered, and softned with wine.

Or thus: Take *dryed Mints, wormwood, red Roses and chamomil-flowers, each half an ounce; toasted Bread two ounces,* boyl them in *wine,* and with *Mastich,* or other Plaisters, apply them.

Or, Take *Mastich half an ounce, Frankincense, Labdanum, each two drams; red Roses, Nutmeg, Cloves, Mace, Cinnamon, each a dram; Barley-meal an ounce,* with *juyce of Mints, Wormwood or Marjoram,* make a Paste, apply it warm to the stomach.

The same may be mixed with Quinces or sour Apples roasted, or crumbs of Bread in Wine boyled and beaten.

In Wine, Take *crumbs of Bread and Caraway, Cummin, Fennel and Bay-berries, each half an ounce; with white Wine* make Cakes, bake them, cut them in the middle, and apply the round piece to the stomach, change it as it grows cold for the other part, in this form use other Emplasters.

If these be wet with Stomach-oyls, they need not be so often changed being dry.

Dioscorides saith that Mugwort beaten with Oyl is good.

Also the Emplaster of a Crust of Bread of Oyl of Mastich, Quinces, Bread-crust, Barley-flower, Mastich, Mints, Coral, burnt Ivory. And that called hot *Diaphænicum* Emplaster of *Mesue,* made of Oyls, Wax, pulp of Dates, Quinces, Bread and Stomach-pouders.

Also Fomentations with Spunges, and the like in time of pain, or before Oyntments are good to prepare.

In pain: Thus, Take *Wormwood, Mints, wild Time, each a handful; Marsh-mallow roots six drams, Roots of long Birthwort half an ounce, Rosemary, Chamomil, Melilot and Dill-flowers, each half a pugil; Fenugreek and Line-seed, each two drams; Nutmeg and Mace, each a dram and half;* boyl them in wine and water.

In a cold Distemper of the Stomach; Take *Mints, Marjoram, Balm, each a handful; Galangal three drams, Cloves, Ginger, each two drams; long Pepper a dram,* boyl them in Wine for a Fomentation.

The same is good against wind, and this: Take *Penny-royal, Organ, Calaminth, Mints, each a handful; Flowers of Chamomil, Elder, Storax or Lavender, each a pugil; Coriander, Fennel, Caraway, Cummin or Ameos-seeds, each two drams; Bay-berries half an ounce, Stechas, Spike, each two drams; Mace a dram:* boyl them.

To strengthen; Take *Roots of Calamus, Masterwort, each half an ounce; dryed Citron-peels three drams, Wormwood, Mints, Marjoram, Balm, each a handful; red Roses and Rosemary-flowers, each a pugil; Cloves, Nutmeg, Galangal, Zedoary, each two drams; Spike, Schænanth, wood-aloes, each a dram; Mastick six drams,* boyl them in red Wine for a Fomentation.

For a loose Stomach: Take *Citron-peels half an ounce, Pomegranate-peels two drams, Wormwood, Sumach or Myrtles, each a handful; red Roses three drams, Pomegranate-flowers two drams, wild Vine tops a dram, Myrtle and Coriander seeds, each a dram and half; Galangal and Cypress-roots, each two drams;* boyl them in *red wine.*

Or of Oyls against pains: Take *common Oyl with the fourth part of Sack, or the tenth part of Aqua vitæ,* and foment after it hath boyled.

Use other Oyls above mentioned, in the same manner, or mixed with Decoctions of Juyces of Wormwood, Mints, Marjoram, with Sack, and the white of an Eg well beaten.

Or use Pouders in baggs to the stomach, made of Scarlet-linnen quilted with wool, apply them warmed with the vapor of Wine.

These may be made of things mentioned in the cold Distemper and Weakness, because they rather heat then strengthen.

Or thus for both ends: Take *Mints, Wormwood, each a handful; red Roses a pugil, Nutmegs a dram and half, Cloves a dram, Mastick two drams,* with *red Coral* make a pouder.

Another

Another; Take *Maſtick half an ounce, Cloves, Nutmeg, Mace, each a dram; long Pepper or Ginger half a dram, Cinnamon a dram and half, Wood-aloes and Sanders, each half a dram*; with *Musk* if it offends not, *and Ambergreaſe, & ſpecies of Diamoſchu, Diambra or Gallia moſchata a ſcruple*, make a Pouder for a bag.

When you will aſtringe more, uſe the things mentioned againſt a looſe Stomach.

Or this: Take *Maſtick half an ounce, Frankincenſe two drams, red Coral a dram and half, Cypreſs-roots, Citron-peels, red Roſes, Cypreſs-nuts and Pomegranate flowers, each half a dram; the ſponge of ſweet Dogs-roſe*, which the French call *Eglenteria, Nutmeg, each a dram*; make a Pouder for a bag.

Of the Fomentation-Medicines for wind, you may make baggs.

Or thus: Take *Galangal half an ounce, Mints, Penny-royal, each two drams; Rue a dram, Fennel, Caraway and Cummin, each a dram; Spike, Schenanth, each half a dram*; with Spices make a bag.

You may make a Bag to eaſe pain of the anodyne Fomentations.

Or of this Pouder: Take *Chamomil, Melilot, Dill, Roſes and Roſemary flowers, each a pugil; Wormood half a handful* few them in a bag.

Againſt wind and pain: Take *Bran, Milium, each half a handful*; fry them for to make a bag with Salt or Mints.

You may alſo ſprinkle Pouders upon the hot Bread wet in wine, as I ſhewed.

As that of Maſtich, with Cloves, Nutmeg and Roſes.

Or ſprinkle them after the uſe of Oyntments, upon the part anointed; or mix them with Oyntments.

Alſo keep the Stomach warm, from the Air or other things by warm cloaths.

And many ſound people wear Stomachers to prevent Cold.

They are made of thick woollen dyed Scarlet, which is alſo cordial, or of double Linnen and Cotton baſted in; or the Doublet is ſtuffed therewith.

Inſtead whereof, they who have weak Stomachs, or have caught Cold therein, uſe Skins and Furrs, of Fox, Hares, young Wolf, Lynx, wild Cats, ſlinke Calfe, and feathered Skins of Birds, eſpecially Vulturs, to which they attribute ſingular Vertue.

And inſtead of Skins they uſe Pillows, which have no Quilts but Down, eſpecially of Gooſe-feathers to the Stomach night and day, if it can endure them, for to help their weak concoction.

And when they are firſt made, that they may work better upon the Patient, they dip them in wine, or ſome proper Decoction or Juyce, and ſtrain them, and then dry them before they are applied. Or they quilt into thoſe Pillows, ſome Stomach-pouders mentioned, but we rather uſe Baggs, as we ſhewed in external Applications.

Hollerius commends twice dyed Purple for a Stomacher, ſhaved or towed to raggs to ſtuff a Pillow inſtead of wool.

It is a good Remedy againſt a cold Stomach, to lay the ſtomach of a wife or husband, or of a child unto it all night (which was *Davids* remedy) or a warm hand.

Or a Dog which is better then another Creature for his Familiarity.

It is good alſo after Evacuation, to roul the ſtomach by degrees to keep it down.

Alſo to draw wind from the ſtomach, apply Cupping-glaſſes to the Navel.

The cure of weakneſs of ſtomach from dryneſs.

If weakneſs come from dryneſs without heat (of which we ſpake in the hot Conſtitution thereof) when the Stomach is bound and hard, and cannot ſtretch, in regard this comes not but from ſome great Cauſe, eſpecially to old folk, when the whole Body is dryed, or in a Hectick, in which the whole Body is extenuated, or long faſting, as in a melancholy woman which would take nothing for fear of being poyſoned, becauſe age cannot be cured, nor Hecticks eaſily, ſo in theſe Dryneſs of Stomach is incurable; in others it is hard, and there is no way but general moiſtning of the Body as in Hecticks: By Meats, Drinks, Conſerves, and other things preſcribed in Hecticks, which moiſten and relax the Stomach. And that will cure if it come from long famine, provided the Stomach be not too dry.

The preſerving of a hot Stomach by Nature, that it turn not to a Diſeaſe.

When the Natural Conſtitution of the Stomach is hot, though it be not yet a Diſeaſe, yet becauſe it is apt to turn ſo from hot meats, which cauſe thirſt and burning, and will eaſily be there corrupted and turn into Choler, it muſt be prevented by good Diet.

They that are ſubject to this muſt abſtain from meats that eaſily corrupt, as Fats, eſpecially of Fiſhes, and Milk, and Eggs, which turns into Choler, and Spawn of Fiſhes, eſpecially of Barbles, which the vulgar think do purge. And from other Meats and Fruits, which though of eaſie concoction, yet are hurtful in this Conſtitution: As other things are good which a weak Stomach cannot concoct.

Spiced Meats muſt be avoided and poudered, and Meats long kept, which are rancid, eſpecially fat or mouldy, as wild fleſh, or Veniſon, or rotten, or mouldy Cheeſe, which are very pleaſant to theſe Conſtitutions, by reaſon of their great Appetites, ſo that they count ſtinking, mouldy and worm-eaten Cheeſe full of Mites, for a great Dainty, which is their great enemy, while their Stomach is ſo burning hot. Alſo ſweet Meats are too hot, and ſubject to corruption, and eaſily turn into Choler, which are Naturally or Artificially ſo, which are known by their Scent, as ſweet wine and Fruits, Melons, Figgs, and the like; and ſuch as have evil Juyce, and that will ſoon corrupt as Cowcumbers. Alſo Herbs as Water-creſſes, wild Parſley, Onions, Leeks, Garlick after the eating of which they belch, Hiccup, and are burned.

Things that are temperate inclining to cold are good for them, as Lettice, Endive, Bugloſs, Spinach and the like, and Fruits. Alſo cold water hurts not them as others, alone or mixed with wine. Sour things are beſt, as ſharp wine and fruits, and ſuch as were mentioned in choleric Stomachs, Thirſt and Feavers.

Alſo divers medicines are good which are there mentioned, when the ſtomach being hot, inclineth to a diſeaſe.

The uſe of ſharp Spaw-waters changeth often the Nature of ſuch Stomachs and ſucceſſion of Age, but by the uſe of hot things they will be then hurt, though not ſo much as in Youth.

The cure of Cardialgia from the Nerves.

If the Stomach ſuffer from the Nerves when other parts are pained, you muſt apply the remedies to the original of the Evil, rather then to the ſtomach.

If the ſtomach ſuffer from too exquiſite ſenſe, there muſt be more warineſs, leaſt it be quickly diſturbed: And if it be, we muſt ſtupefie the Senſe by Narcoticks.

And if the Heart suffer (as they say) which is of the stomach, from the Nerves in a passion of the Mind, the Nerves must be refreshed, and then the *Cardialgia* will cease.

The cure of a cardialgia, from the colick.

When wind or Excrements are retained in the colon, and there is a Cardialgia in the said region of the Heart, when they come away the pain ceaseth. If they come not away use Clysters, as in the Colick, as that of oyl Honey and wine, when the pain comes from a purging Medicine lying long in the colon.

The cure of cardialgia, from the Midriff.

If there be Heart-ach or pain in the said lodg of the Heart, from the Midriff, because there is difficulty of breathing, which is most troublesome, we shewed in *Dyspnœa* or difficulty of breathing, what is to be done.

CHAP. XII.

Of the Pain of Hypochondria or Sides under the Ribs.

The Kinds.

WE call that the *Hypochandriake* pain, which is in the Sides of the Belly to the Back, or on either side, not in the outside fleshy, or Musculous part, of which we take in Superficial pains, but deep under the Bastard or short Ribs, and thence are called *Hypochondriak*. Of these *Hippocrates* often spake. The Empericks mention these pains in the Diseases of the bowels under the short Ribs, and call it the pain of this or that Bowel. These differ first in respect of heavines or burning, pricking or tearing.

A heavy dull pain in the Hypochondria.

A dull pain which is heavy, which increaseth some times by stretching and pricking is in the right or left side. And there is either no hardnes or tumor to be felt or seen, or both appear under the short Ribs, or between them. And the Ribs are bent outwards more then usually. And there is also a pressing pain of the stomach and difficulty of breathing, and other Symptoms, as want of Complexion in the Face, with paleness in a *Cachexy*, yellowness and blackness in the Jaundies: or a tumor of the Belly and Feet in a Dropsie. These accidents are more terrible then the pain, and therefore we shall here speak of them also.

Under the right and left Hypochondrion, by the Back bone, seldom on both sides, there is a heavy pain in the space between the Loyns, which groweth greater, this is called the stone in the Kidneys or *Lithiasis*. This pain increaseth upon motion of the Body, especially when the Back is bent with the body and at lying down, when the part is prest: and there is a numness of the Thigh on that side, to the Knee or sole of the Foot, with great pain, as I have often seen: with stoppage of Urin or pissing of Blood, after violent excercise, or riding. And the Sediment or bottom is black in the Urinal. This at somtimes is white and muddy, like Whey at the first, and after setling, the bottom is white as Chalk, and much somtimes. Somtimes it is gravely and white or scaly. This pain is also increased by new accidents.

The stone in the Kidneys is called Lithiasis.

There is somtimes a burning pain in the top of the Hypochondria, before, on the right side, this is called the Inflammation of the Liver, which is the cause of it, or *Hepatitis*. Or it is in the left side backwards, and is called the Inflammation of the Spleen or Splenitis. Somtimes it is below in and about the Hip, and behind about the Back on either side, and it is called the Inflammation of the Kidneys, or *Nephritis*.

A burning pain of the Hypochondria, is from the Liver or Spleen.

In all these kinds, there is a burning, stretching and heavy pain: also beating, especially if it be the Inflammation of the Spleen, on the left side. In which there is a tumor to be felt, and sometimes on the right, when the Liver is inflamed, which appeareth more, when the patient bends to the right side, but it is without redness, not as the inflamed Muscles are. In both these Inflammations, the pain reacheth to the Throat, and is increased by the lying on the contrary side: and it is more burning in the *Erysipelas* of the Liver.

In all kinds, there is a final dry Cough and in the Inflammation of Liver or Spleen, the Hiccup. And in that of the Liver, choler is vomited, and the Mouth bitter, or voided by stool. Also from Inflammation of Liver or Spleen there is a Jaundies, and from the Liver, or Bloody flux somtimes, and there is often Pissing with heat, when the Reynes are inflamed.

There is with all kinds a Synoch Fever going afore, or following. With restlesness, thirst and dryness of tongue. Quick and little breath, swift and great Pulse. High Urin and somtimes matterish.

These ceasing, there is a heavines in the part mentioned, and other accidents.

A pricking pain in the Hypochondria.

The pain of the Spleen, falsly so called.

Somtimes there is a pricking pain in sound people suddenly on the left side somtimes on the right, which the Germans call *Milzstechen*, pricking of the Spleen, falsly. It comes chiefly after meat, upon riding exercise; with a Tumor like that of the Cramp from wind, it is pricking and very tearing, when breath is fetched, and lying upon the Belly abates it, and at length it goes away of it self.

In other Diseases of the right or left side, there is also a heavy pain, with greater Symptoms among which I shall speak of that. Those pains that are outward in the Hypochondria and about the Groyns in Ruptures, are refer'd to the Diseases causing them.

A cutting and stretching pain in the Hypochondria, is from pain of the Womb.

There is a cutting and stretching pain in the Loyns, which is called the pain of the Womb, because it is caused, from thence, At the time of the courses, or when they are stopped. Somtimes in great bellyed Women, often after child bearing and with other Diseases of the Womb, where it is described exactly.

A twitching and grievous pain of the Hypochondria.

Nephritis or Stone in the Kidneys.

There is often on one side, seldom on both, a twitching, tearing and pricking pain most grievous in the Reyns, somtimes by fits, somtimes returning in a month or year, this is called *Nephritis* from the cause, which is the Stone or Gravel, it somtimes is fixed and

and somtimes goes to the Groyns and not the Belly, as the Colick. And the Leg on that side is benummed.

At the first there is vomiting of flegm and choler and quick and little breathing.

At the beginning the Urin is with difficulty crude like water, then thick and after bloody, and there is red, yellow or white Gravel found at the bottom, growing together somtimes. Somtimes they are so little, they stick in the sediment and fat and fly up, or stick to the pott. All these last long, or the pain goes to the bottom of the Belly, and then departs in a moment: or there is some hurt in the part, as we shewed in stoppage of Urin. And this either is not, or ceaseth presently, if one or more stones be pissed forth: the stone is somtimes sandy and brittle, red or yellow or white, long or round, smooth or uneven, greater or less: or hard and flinty and then white or dunne, somtimes of a strange shape.

The Causes.

The Diseases of divers parts in the Hypochondria under the short Ribs, cause divers pains. These parts are either the fleshy Bowels, as Liver, Spleen, two Kidneys with the Ureters; or parts belonging to them, as part of the *Perinæum*, or Caul, Stomach and Colon; The diseases whereof reatch thither and are felt under the *Hypochondria*.

Some diseases of the fleshy Bowels cause pains, these are manifest on that side, where the Bowel lyeth. If from the Liver, it lyeth on the right side foreward, the Spleen one the left side, under the Stomach, the Reyns one both sides with the Ureters, under the other two Bowels. The pain of the right Kidney, is known thus from the pain of the Liver, for when the Liver is afflicted, the pain is more on the right side foreward, where the greatest part of the Liver lyeth, or against the lodg of the Heart, where it lyeth, upon the Stomach: but the pain of the right Kidney remaineth fixed backwards, a little lower in the Back. But the pain of the left Kidney, is not so easily distinguished from the pain of the Spleen, because it is higher then the right Kidney. And contrary to the common opinion, the Spleen lyeth more backward, next to the left Kidney. Not on the left side so forward, as is supposed. Therefore the pains of these parts must not be distingnished by the Scituation, but by other signs.

The diseases that may happen to all these and cause pain, are Inflammation, Weight, Obstruction or Distension, from a Humor or Tumor, or from the Stone.

Inflammation of the Liver, Spleen, Reyns, is the cause of burning pain in the Hypochondria.

When there is Inflammation in these bloody Bowels, Liver, Spleen or Kidneys, it is from pure or fowl Blood, and causeth a burning where the Bowel lyeth, on that side. For these Bowels have but dull sense of feeling, from the outward Tunicle, yet when the Inflammation reacheth to the parts adjacent, which are very sensible and Membranous, the pain is great, and the Tumor more appearing, when the Inflammation is in the outward gibbous part of the Liver, or when the Spleen, which lyeth lower under the Ribbs, is swollen: and the bearing is more, when the Spleen is afflicted, because it aboundeth with Arteries; and there are other accidents, as were shewed, When those Bowels that lye upon the Diaphragma are inflamed, for then Breath is hindered, and there is a Cough, and the stomach disturbed: And when the Liver is inflamed, Choler is vomited, or there is a looseness or Jaundies; and the Reins inflamed, make the Urin sharp. And if an Ulcer follow an Inflammation in these parts (as appears by pissing of matter from the Kidneys, and we see in Anatomies in the Liver and Spleen) or if there be a hardness left from the Inflammation not well discussed, there will be accidents that will follow accordingly.

A stroak or contusion, or the like, made outwardly upon the parts, may be the cause of the Inflammation, as also very hot things taken in, may inflame the Liver and Spleen, as well as the stomach which lyeth near them. The chief Cause of Inflammation of the Liver is drinking much cold water in a great heat, which makes a sudden repercussion. And the Cause of the Inflammation of the Kidneys is the stone, which seeks a passage forth, and gets into the Vreters, and causeth great pain and flux of blood: This stone increaseth the Disease, by being together with the Inflammation. All these Causes of Inflammation kindle a symptomatical Feaver. But when blood is hot in a Synoch Feaver without these Causes, as we shewed in Feavers, and sent upon any of the Bowels aforesaid, it may cause these Inflammations which follow a Feaver as their cause: And it may be also from plenty of blood, when a Feaver goes not afore but follows after, which blood breaks out of the Vessels, and causeth an Inflammation. If this Blood, if it be in the Liver impure, and not well purged from Choler, causeth an erysipelated Phlegmon, and the great Heat that comes from thence, by which the Bowels seem to burn, whence comes the burning Feaver called *Typhodes*. And the same things happen, if there be a true Erysipelas, from pure Choler spread through the substance of the Liver from the Gall. And this may come also from the Causes mentioned, that produce other Inflammations.

The obstruction of the Liver, Spleen, or Kidneys, causeth a blunt and heavy pain in the Hypochondria.

If the Liver or Spleen be obstructed by a Humor, so that they are more heavy, there is a weight in the sides. This is seldom from a Humor in the Kidneys, but from a Stone or Gravel. This heaviness increaseth as if a weight lay thereon, if there be a hard Tumor, Scirrhus or Oedema in the Liver or Spleen. This may be in the Kidneys, from the same tumors with great pain and heaviness. The Causes of all these shall be mentioned in other great accidents: We shall not speak of Wind which some will have to be a cause of pain in the Liver or Spleen, because it cannot be in such quantity there, as to cause it by stretching, neither is the inside of those parts sensible, neither do we see how it can be in the Kidneys.

A stone and sand in the Liver or Gall, is the cause of heavy and dull pain in the Hypochondria.

From a Stone bred in the Liver or the Gall, or from sand or gravel, gathered and returned, there is felt a Heaviness as from a Tumor. This may be, as I have seen in Anatomies; and it hath been observed that much red Gravel like Blood hath been voided in a Disease of the Liver; and by finding stones in the Livers of Beasts: We may collect that the same may be in a man. These hapning, cause this pain and other Symptoms, such as come from a stopped Liver, as we shall shew, we cannot affirm that Stones may breed in the Spleen, but from that general rule, that they may breed in any part of the Body, because we never saw nor heard of any.

Stones

The stone or sand in the kidneys, is the cause of heavineſs in the Hypochondria.

Stones of divers sorts, and gravel in the Kidneys and Vreters, cause the Nephritick pain, which is either a Heavineſs only in the Reins, gentle and dull, when the Gravel lyeth still, or the Stones sticks to the kidney; but the pain is greater when much Gravel is gathered there, or the Stones be great or many, with pricking and cutting, and numnes in the Leg on that side, from compreſſion of the Nerves in the Loins, or piſsing of Blood from great motion, which maketh the stone beat upon the substance of the Kidneys, and sometimes of matter, and some part of the stone. These accidents are greater and longer, when the stone is long detained, and grows up in one place, and especially when it grows so that it fills the Reins and swells them, as we have seen great branched stones in Anatomies: Or when the substance of the Kidneys is worn away, and the stone is wrapt in the Membrane only, as in a purse where the Kidney was. Hence must needs be great pain; and I opened a Woman that in her life time complained for many years of such a pain, and often miscarried and found it so. Also I opened a woman that after a mischance pined away and died, in whom besides other accidents, I found both Kidneys eaten away, and full of matter, and two great square stones in the right Kidney, and two in the left, one like a cross, another like an almond, with many other little ones. This is usual, for others have told me as much. I saw also a stone in the outward Fat of the Kidney, that grew to the tunicle which was great, but caused no pain, because it was hollow and light.

A Stone and Gravel in the Vreters, is the cause of Nephritis.

If the Stone get from the Kidneys into the Vreters, the pain is greater, and hath the aforesaid Symptoms, first Vomiting from the consent of the stomach, and because flegm is vomited, they suppose that the pain come from that, but that came from the stomach, because it could not so suddenly come from the Kidneys. The Urin is then wateriſh and crude, because the Choler is carried another way by vomiting and pain. That pain which is from the Stone, getting into the entrance of the Vreters, when it returns to the Kidneys again ceaseth, or is less; but it increaseth when it descendeth through the narrow passages of the Vreters, by stretching them, and so it lasteth till it gets into the Bladder, and then it ceaseth suddenly. And this pain may come from Gravel that passeth slowly through the Vreters, especially in the strait passages, which have been so enlarged in some that I have opened, that they have piſsed Stones and Gravel without pain.

The Cause that breeds Gravel and Stones is Flegm, according to the vulgar opinion, which is so dry by the heat of the Kidneys, that first it is Earth, then a Stone. But in regard Mudd or Slime is rather bred of dryed Flegm, and it cannot be further hardned by any Art or Nature, nor that that chalky matter which is found in the Joynts, comes from Flegm; as we shall shew in the Diseases of the Joynts, or if it come from it, it cannot be earthy. And if it came from Flegm, Stones should rather breed in the Stomach and Brain, and other places where it aboundeth, than in the Kidneys to which that slimy Flegm they speak of, scarce cometh, or if it cometh, it cannot stay long, from these reasons and others, we cannot be of their opinion.

We shall rather make an earthy substance to be the cause of this Earthineſs, which we have shewed may be in Humors distinct from Flegm, as in the serum or whey, by these arguments. For as water flowing continually through the passages of the Earth and Channels, and carrying a terrene or earthy Matter with it, which it leaves upon dry places, causeth Mudd and Sand, and the rather when it is impure and full of clay, or when it is Naturally salt, nitrous or vitriol, by which as we have observed in Spaw-waters, they have caused stones in the Channels, through which they have flowed. In like manner the Serum receiving a salt Juyce and earthy Matter, which is bred dayly of Salt in the first Concoction which a man alwayes useth, and other earthy things (as you may observe in Beasts which love salt, so that they lick the walls as Goats, in which when old, many stones are found) if the Serum have much thereof, it sticketh to the dry and strait parts, through which it passeth and affords matter for sand and stones. Especially in those parts where the Serum separated from the Blood continually passeth through the Kidneys, therefore there Sand is first bred. These are red because they breed in the substance of the Kidneys, and grow into the Stones, if they continue long, and there increase by addition of new matter, or if they fall into the Bladder, and stay there, there they increase. And the older they are, the less red they are, but paler and firmer. And while the Serum is in the Blood, it may do the same in divers parts fitted for it: As was shewed concerning the Liver. And if it be mixed with other Excrements it doth the same, and the rather when it takes sharpneſs and dryneſs from the Choler. Hence it is that so often we find Stones in the Gall of the colour of Gold, or Silver, from the yellow Choler. And this is done in the Body by the Serum, so when it falls out of the Body, by tears it causeth Sand in the Eye-lidds: As was shewed in the Diseases thereof. Also in the Serum which is purged in the Bladder, namely the Urin, by which the stones that fall into the bladder are increased, the same may be observed. But it is more plain from Urine made in a Chamber-pot, for if the same Chamber-pot be used long and not scoured, there will be a sandy and gravely matter growing unto it, and and if it continue yet unscoured, it will turn to thick scales and stones. And as this may be done in time from any Urine, especially the saltest and sharpest, so may it be done speedily by Art, when the Urin is boyled. Therefore the Chymists make Salt out of Piss and Lye that hath earthy matter. From which as we shewed that Sand and Gravel may come, so may they increase into stones, from a salt, sharp and sour Juyce mixed with the Earthyneſs which is in the Serum or urin, which fastneth and sends them (as the Stone-cutters use to make a hard Cement like Iron of Filings of Iron, and Juyce of Vitriol and Vinegar) this cannot be from Flegm as some say, which cannot so glew together the earthy Bodies, that they may make a stone.

Neither can the heat of the Reins which they make the efficient cause of the stone, so dry the Flegm, and burn it, that it may be brought as it were to ashes; in regard stones may breed in other cold membranous parts. And that it should breed in certain places, the straitneſs of the part, to which the matter may fix longer and better and the dryneſs thereof, where it may grow hard, is required and ought to be the assisting Cause. Therefore they who Naturally have dry reins as some Infants, which have in the Cradle stones in the Kidneys, with great pain, and piss them forth, as I have observed, especially in one who had a white clear Stone before it was a year old, which stuck in the Yard, and stopt the Urin, and at length came forth with much Urin after it, and the falling of the horrid shining Tumor in the Belly: Or they who have dry Reins from age or other causes, are most subject to the Stone. And

if

if it come from the Parents, it is hereditary, and takes the children at the same years as it did the Parents. *Fernelius* (not explaining the quality) calls this a sandie Constitution of the Kidneys.

The stretching of the Perinæum by wind, is the cause of a pricking pain in the Hypochondria; Oedema, which some falsly call the pain of the Spleen.

Some pains in Hypochondria come from the Perinæum or cawl which is spread under the Belly before or behind; and is broadest under the Hypochondria, sides and back. And when that is extreamly stretched, and drawn by the parts to whose Tunicles it groweth, it is as it were pull'd asunder, and hence comes a pricking pain, if it be in one part only, or a tearing and cutting pain, if the largest part of it be so stretched.

The cause of this is often wind, which gets between the Cawle and the Muscles, and stretcheth, and causeth that pricking pain, which they which use Exercise after meat, are subject to in the same manner, as there is a pricking pain in the Breast in a false Pleurisie, from the Membrane or Tunicle succingent, or which girdeth it. The strong attraction of the Muscles of the Belly by strong motion presently after meat, doth bring this, especially by riding when sitting in the saddle, they bear strongly upon the stirrups, and by forcing with retention of breath, constringe the Muscles of the Belly. Even as we shewed in the Cramp, how it might come from wind in other parts of the Body, by the same kind of straining. For which cause, as in a windy Cramp the Muscles are lifted in the part pained, and cause a swelling which sometimes appears to the Eye. And if the sides be bound with a garter (as we shewed in the Cramp) and the Muscles drawn down by a contrary straining, as was exactly shewed; the pain ceaseth or abateth. So here is a kind of windy Cramp, and it may be referred to the Disease of the muscles and cawle pluckt asunder (as we shewed) This the vulgar calls the pain of the Spleen, because it is more often in the left then right side, which is by reason of the Stomach that lyeth on the left side, and because more Wind is bred in the left side, as in Hypochondriack Melancholy, yet it comes sometimes on the right side.

The stretching of the Cawle from the Vessels and Bowels that are joyned to it, causeth stretching or tearing pain in the Hypochondria.

These pricking or cutting pains which come from other Causes under the sides, when the Peritonæum or Cawle is stretched, are caused from the affliction of the Bowels, as Liver or Spleen, which are joyned to the Cawle, or from the Vessels of the womb which grow to the Back, and by the Cawle. Hence it is that pains of the Womb reach thither; or from the stretching of the Peritonæum in a Tympany, or in Women with Child, there is a little pricking, or by continuance a great pain, as in the Hernia or Rupture. The Causes of all these shall be laid down in other great accidents which befal.

A Disease in the Stomach, causeth a Hypochondriack pain.

The Stomach being on the left side under the Hypochondrion, is pained about the lodge of the Heart before, with a pain called *Cardialgia*, on the left side; especially in the Hypochondriack Melancholy, when there is rumbling and burning: As is shewed in Melancholy.

The Colick causeth the Hypochondriack pain.

The pain of the Colon which is placed under the Stomach, from one side to the other, is also in the Hypochondrion, but stayes not, but runs about the Belly: As shall be shewed in the Colick.

The Cure.

The cure of heavy, dul or stretching pain from the Liver, Spleen, Reins or Cawle.

We shall mention only here the Cure of those Diseases with pain in the Hypochondria. For the Cure of the Diseases of the Liver, Spleen, Reins, Cawle, which we mention here only for the pain sake, because the pain in them is dul, shal be shewed in other Symptoms, as Cachexy, Jaundies, Dropsie, and the like, by which they are more manifest then by the pain. Also if there be a pain in the Hypochondria from the Stomach, Womb or Colon, reaching thither, because the pains of the stomach are more in the region of the Heart, and of the Colon and Womb, more in the lower Belly where they lye, we have shewed the Cure of that in Pains of the Heart, and of those Pains in the Belly. And here we shall only declare the Cure of the Pain, where it chiefly shews it self, in respect of its cause, as it comes from the Inflammation of the Liver, Spleen, or Kidneys called *Hepatitis*, *Splenitis*, or *Nephritis*: Or from the Peritonæum or Cawle, vulgarly called *Spleneticus*.

The cure of pains from the stomach, Colon, or Womb.

The cure of the Inflammation of the Liver, Spleen and Kidneys.

The Inflammations and Erysipelas of the Liver and Spleen, are dangerous and often deadly, and if they impostume, and leave an Ulcer, or be ill cured, and a Hardness or Scirrhus follow, they cause a Dropsie, and incurable Diseases. The Inflammations of the Kidneys are more easily cured, they are worst, when the Stone is there also: If they leave an Ulcer, it is also very stubborn, as shall be shewed.

The Method in the cure of all these Inflammations is the same as in others, that is while they are coming to divert the Blood another way from the part, or by repelling and deriving it, and to allay the Heat and Burning, and to discuss the remainder, or if that may not be to ripen it. And if there be Hardness, Scirrhus, or Impostume, and after that is broken, an Ulcer, (which may be both in Liver, Spleen and Kidneys) we shall shew what is then to be done in other Symptomes, that come from thence. Against Inflammation, use the following Remedies.

Blood-letting diverts the Blood while it is flowing to the part another way, especially in the Inflammation of the Liver or Kidneys which have great Branches from the hollow Vein: And in the Phlegmon of the Spleen, also it must not be neglected, though it hath Veins only from the Gate Vein, for reasons shewed in Inflammation of the Stomach. Therefore in the Inflammation of all the three parts, except any thing prohibit, open suddenly that Vein which most appeareth, on the same side, and bleed plentifully for Revulsion, and if there be great Plethory or Fullness, open the same Vein again, or that in the Hand on the same side, either against the Thumb, or little or middle Finger, according to *Rhasis*. And in the Inflammation of the Kidneyes open the Vein in the Foot.

The Hæmorrhoids being Branches of the Gate Vein if they be opened derive much from the Inflammation of the Spleen, and revell from other Inflammations.

Cupping Glasses to the Hipps and Buttocks, or that side, do revell and derive in the Inflammation of the Reins. The Ancients did use them the day after bleed-

ing, to the right Hypochondrion, when the Liver was Inflamed after scarification, and applyed them the next day again to the same place. others used them only at the Declination, to take away the residue without Scarification.

Also Ligatures and Frictions of the extream parts are good at the first, as in other Inflammations, to revell.

And Clysters before Bleeding, and when the Body is bound, as it useth to be in these Inflammations, or Suppositories are good.

And Clysters because they reach into the Colon, and come near to the part, and cool, are best at the first, and are as altering Topicks; such as are prescribed in Fevers.

A loosning Clyster, that a little provoketh. Take *Mallows Roots and all, Beets,* and for the Kidneys *Pellitory of the wall, each an handfull*; *Violets, Bran, each a pugil*; *Linseed an ounce, Annisseed a dram,* boyl and strain them, dissolve *Honey, Butter* and *Oyl, each an ounce and half*; *Pulpe of sweet Prunes, or Cassia an ounce,* with a little *Salt,* make a *Clyster.*

A cooling Clyster. Take *the emollient Herbs and Roots, Purslane, Gourd leaves, each an handful*; *Violets, Mallows, and Chamomile flowers, each a pugil*; *Linseed, six drams, four great cold seeds an ounce, Barley a pugil,* boyl and dissolve, *Honey of Violets halfe an ounce, Cassia, an ounce, Oyl of Violets, and Water-Lillies, each an ounce and half.*

If they cannot take Clysters, give a Laxative, take heed of Purgers for fear of more Flux and Inflammation, Cassia therefore is not very safe.

But we give things that loosen without heat and pricking, as Prunes and other loosning fruits, and Spinach, Mallows, Violets boyled in Broaths, Whey, syrup of Violets and Roses, and the like.

In the declination or after the fourth day when heat abates, to take away the reliques, when the Liver or Spleen are afflicted, we give a gentle Purge, because they can discharge themselves by the Meseraicks into the Guts. And the rather, when the Disease is in the hollow part of the Liver, into which the Gate-vein branches it self, and if Choler boyling in the Gall or sent out, causeth an Erysipelas. In these cases we may give Cassia, or some gentle Purger.

Or this Decoction which cleanseth and openeth. Take *Liquorish two ounces, Grass and Knee-holm roots, each an ounce*; *red Pease a pugil, Senna an ounce, Polypody an ounce and half, Cordial-flowers a pugil, Anise-seed three drams, Fennel seed and Dodder, each a dram*; boyl them, strain and add *syrup of Roses an ounce and half, syrup of the two Roots an ounce, Cinnamon a dram, Schœnanth half a dram,* for three or four Draughts.

Or this Infusion: Take *Rhubarb four scruples, Cinnamon, Spike, Schœnanth, each a scruple*; sprinkle them *with white Wine,* and steep them in *Endive and Maiden-hair-water,* add *syrup of Roses, with Senna an ounce,* make a Potion.

If the Disease be in the Reins, because they have nothing to do with the Meseraicks, these are not proper, except some other reason require it, for then it is better to provoke Urin, or when it is in the convex part of the Liver, which hath branches of the hollow Vein, then it is good in the declining to take away the remainder.

In the beginning of Inflammations of Liver, Spleen or Kidneys, we give gentle Astringers and Coolers, and which strengthen them, especially the liver and spleen. Then we leave out the Astringents, and mix Cleansers with Coolers, and then Openers, which take away the remainder by Urin or Stool. Such as were prescribed for the Inflammation of the stomach.

Or these following at first to repel. Take *syrup of dryed Roses or Myrtles, each an ounce*; *syrup of Currance, or Bar-berries, or of Succory, or of Plantane for the Kidneys, each half an ounce*; *Endive, Rose and Plantane-water, each an ounce and half*; *red Sanders half a dram*: Drink it in the morning, and make it again for the evening.

A cooling, cleansing and opening Julep in the progress. Take *syrup of Violets and Endive, or Sorrel or Bizantine, each an ounce*; *syrup of Purslane, and Water-lillies* in the Inflammation of the Reins chiefly *half an ounce, Straw-berry, Liverwort and Lettice-water, each an ounce and half.*

Or this Decoction: Take *Succory roots an ounce, Endive, Succory, Lettice, Strawberry-leaves, each a handful*; *Violets, Comfrey, Succory-flowers, each a pugil*; *Barley a pugil, the four great cold Seeds, each a dram*; *sharp Prunes six,* boyl them, strain and add *Sugar.*

We cool also with ordinary Drink, made of Water, and Barley, and Violets, and other sour things, and with Conserves and Candyes, mentioned in Feavers and Inflammation of the Stomach.

In the Declination, when we will cleanse, and open and purge by Urin; We take *syrup of Maiden-hair, of Bizant, each an ounce*; *syrup of Endive, and of the two Roots, each half an ounce*; *Water of Maidenhair, Agrimony, Fumitory, each an ounce*; *Spike and Schœnanth, each a scruple.*

Or this Decoction: Take *Roots of Asparagus, Fennel, Parsley, Liquorish, each an ounce*; *barke of Tamarinds* for the Spleen *half an ounce, Maidenhair* for both Liver and Spleen, *Agrimony, Ceterach, each a handful*; *Cordial and Broom flowers, each a pugil*; *Chamomil-flowers half a pugil, red Pease a pugil, the four great cold Seeds half an ounce, Anise-seed two drams, Parsley-seed and Agnus Castus, each a dram*; *Raisons an ounce,* boyl them, and in the straining dissolve *syrup of the five or of the two Roots an ounce and half,* with *Cinnamon* make it for three or four draughts.

Pills to discuss the reliques of the Inflamation. Take *Turpentine two drams, Gum Ammoniack dissolved in Vinegar a dram. Myrrh, Storax, each a scruple, Schœnanth, Spike, Asarum, each half a scruple*; with *Sugar* make Pills, take *two scruples, or a dram,* with *Barley, Pease or Parsley-water.*

Outward Coolers must be applied at the first which astringe and repel; then mix Dissolvers therewith, and in the Declination, use Discussers alone to dissolve the remainder, or to ring it to Suppuration, if it will not be discussed. To all these you must add Strengthners, when the principal parts are inflamed. And these must all be applied, not actually cold, but temperate at the first, and warm afterwards.

A repelling Epithem to be used at the first. Take *Rose-water four ounces, Plantane-water two ounces, Vinegar of Roses an ounce, Sanders a dram, Camphire a scruple* (you may ad Juyce of Plantane or Violet-leaves, or of Pears or Quinces) *Oyl of Roses half an ounce, or Rose-vinegar.*

Then use this; Take *of Nightshade-water, Water of Lettice, Violets and Water-lillies, each an ounce*; *Endive or Succory-water* for the Liver *two ounces, juyce of Nightshade, or Purslane, or of red Roses an ounce, Vinegar half an ounce, Sanders a dram,* with *Oyl of Violets* make an Epithem.

Or dip Clouts in Juyce only of Nightshade, or of Endive for the Liver, and apply with a little Vinegar and Oyl of Violets, Roses or Water-lillies.

An Oyntment for the beginning of the Inflammation. Take *Oyl of Roses, Quinces or Myrtles, each two ounces*; *juyce of Plantane and Vinegar, each an ounce*; *or juyce of Endive or Succory* for the Liver or Spleen *an ounce,*

boyl

boyl them till the Juyces are consumed, add *Sanders, red Roses, each a dram*; with *Wax* make an Oyntment.

At the first use the Cerot of Sanders for the Liver or Spleen, and the cooling Oyntment of *Galen* for the Reins. And Oyntment of Roses for all Parts.

Or this Cataplasm when the noble Bowels are affected. Take *Quinces four ounces, Plantane and Hoystongue, each an handful*; *red Roses a pugil, Pomegranate-flowers half an ounce*, boyl and stamp them, ad *Barley-meal three ounces, Oyl of Roses two ounces, red Sanders two drams*, make a Cataplasm.

In the progress, to dissolve the Inflammation of Liver or Spleen. Take *Oyl of Roses two ounces, Oyl of Wormwood, or Spikenard an ounce, Oyl of Chamomil, or Melilot half an ounce, Sanders a dram, Spike half a dram*, with *Wax* make a Liniment.

An old Oyntment for Inflammation of the Liver, made of Poppy tops, Rue, Linseed and Schænanth, is good at that time.

Or the Cataplasm of *Galen*, made of Quinces and Dates.

Or this Cataplasm: Take *Figgs, Dates, Raisons not stoned, each three ounces*; *Wormwood, Harts-tongue, each a handful*; *red Roses a pugil*, boyl them in *Wine* and *Water*, stamp and add *Barley and Fænugreek-meal, or Linseed, each two ounces*; *Pouder of Orris a dram, Oyl of Chamomil and Lillies, each an ounce and half*; *Saffron a scruple, Spike and Schænanth, each half a dram.*

In the Declination, the Emplaster of Melilot, Marsh-mallows, or Dyachylum, with Orris, do the same, and also maturate.

In the Inflammation of the Kidneys, use relaxing and resolving Ovls, as that of Oyl of sweet Almonds, or in which Marsh-mallow-roots are boyled, Oyl of Chamomile, Lillies, or the like, and Grease or Fats.

Or Oyntments of the same as that called Resumptive.

Also a Bath of Marsh-mallows, and Mallows, Lillies, Chamomile, Fænugreek and Lineseed, and the like, or a Fomentation for the Reins.

The preventing, and curing of Gravel in the Kidneys.

A Pain in the Reins from Stone, or Gravel, is not only to be cured when it comes, but to be prevented, by hindring the breeding of Stones, when we fear it, by reason our Parents had it, or are otherwise disposed to it. Especially in those who pisse Sand, we must take heed least it cleave to the Kidneys, and breed a Stone. And if we suspect that there is a Stone from former pains, and present Heaviness in the part, we must prevent pain, hinder its growth, and labour to expell it. This is by taking them of from things that breed the Stone, and heat and dry the Kidneys, and by giving cleansers to keep the Stones from growing to the Kidneys, and to break them and bring them down. But in curing of the pain of the Stone, which sticketh in the Passages, we must relax the passages, break the Stone, and labour to get it forth, all which shall be now related, as also the Diet and Exercise, and Purgers, and Clysters, and alterers and outward remedies.

There must be moderation and choise in meats and Drink, which must be of good juice, because the stone taketh its Original from them, Meat must be Temperate, and very little salted, very salt and dry things must be forborne, for from these comes the cheif earthly Matter. Also very sharp and hot things that dry and heat the Kidneys, as Sawsages, and Spices, rather then crude glutiners, and things they thought, breed Flegme, for these cause a thick juice, which maketh Obstructions but not the earthly Matter, except there be some other cause, for that is layd aside in the serum, in which they are washed, as we shewed in the Causes Therefore Cheese which they forbid so earnestly, as the great Cause of the Stone, cannot do it but by its saltness, and sharpness; but fresh Cheese, Milk, and milkie Meats, and other fresh meats though they be glutinous, cannot breed the Stone.

Modetate Exercise before meat is good to remove the Stone, which fixeth by Idleness. Therefore they void Stones more after exercise, then after Sleep, and the Urine made at that time, is best to judg by. Therefore when the Stone is little and sticks in the Kidneys, Moderate Exercise is good. but when great, it causeth pain by moving it, and in an old disease, strong and violent motion of the Loyns, tears the flesh from the Stone, and causeth pissing of Blood, and an Ulcer. Neither do some allow exercise presently after meat, least it be distributed before concoction, and carried to the Kidneys, to breed matter for the Stone, but this Crudity will rather breed Obstructions and other Diseases then the Stone, as we shewed. Immoderate Venery dries and weakens the Reins, and disposeth them for the stone, and if there be a stone, it stirreth it, and causeth pain. Therefore they who have lived long, without the use of Women, when they marry are subject to the Stone, which they never formerly perceived, being old men, as we have observed often. Also loosness of Body in orderly going to stool hinders the increase of Excrements. And not holding of the Urin when it urgeth, prevents the fixing of the Gravel.

If the Body be foul, purge Spring and Fall, and oftner to prevent, not only Flegm, which some think is the cause of the stone, but all humors. And to take away the cause of the stone, use gentle things that carry the salt and wheyish Matter from the Reins, and cleanse the Blood, as they say; such as shall be mentioned for the Cure.

For when the fit of the stone is, we use Laxatives or Clysters to take away Excrements and Wind, then Purges, but not violent, that they may not meddle with the cause which is rather to be looked at in the time of prevention, then of cure. But such as may gently move the stone drawn, mixed with things that break it, as we shall shew.

Cassia is excellent to prevent, and in the fit also an ounce or more, with syrup of Violets or Sugar candy, or with the Decoction of Liquorish, or Sebestens, or convenient Waters, or seeds of Winter-cherries, or Gromwel, or a dram of Pouder of Turpentine, with Oyl of sweet Almonds to abate pain.

Also Turpentine two drams, with the yolk of an Eg, convenient Liquor, Sugar or Honey, or with Cassia.

Or with Benedicta laxativa, or two drams of the pouder thereof, with Sugar.

A loosning and cleansing Decoction. Take *Liquorish an ounce and half, Raisons stoned an ounce, Sebestens ten pair, Prunes five pair, Pease a pugil, the four great cold seeds half an ounce, Anise-seeds three drams, Senna and Polypody, each an ounce*; *Violets a pugil*, boyl them, and add *Sugar, syrup of Violets or Roses* for two draughts.

It is better to add *Fennel and Parsley-roots, each an ounce*; *Saxifrage and Marsh-mallow roots, each half an ounce*; *Mallows, Maidenhair, each an handful*: *Dill-flowers a pugil, Alkekengi-berries two drams*, and make the quantity *of Senna an ounce and half*, and to add *Rhubarb* and *Agarick*.

A purging Wine: Take *Senna an ounce, Carthamus-seeds a dram, Agarick or Rhubarb two drams, Liquorish an ounce, opening Roots half an ounce, Violets and Mallows, each two drams*; *Berries of Alkekengi, Anise and Lovage-seed, each*

each a dram; *Currance four ounces*, add *Wine three pints*, drink this to prevent the stone, and when it begins to purge.

A preventing Electuary, and to be taken in the fit. Take *Cassia two ounces and half, Prunes and Sebestens, each an ounce*; *juyce of Liquorish two drams*, with *syrup of Violets* make an Electuary, give *an ounce* with things against the stone, and some scammoniate Electuary, as that of Juyce of Roses, Diaphænicon, Elescoph, and Benedicta laxativa a dram and half.

Or give the gentle Electuaries with Rhubarb and Senna, as Catholicon and Lenitive, and the like, alone or with the Decoction mentioned.

Or gentle Pills, with things that break the stone. Or these: Take *species, Hiera and Benedicta laxativa half a dram*, with *Turpentine* make Pills: Or *a dram of Benedicta*.

Or this Pouder: Take *Senna an ounce and half, Rhubarb two drams, Turbith three drams, Ginger a dram, Cinnamon two drams, Polypody three drams, Gromwel and Burdock-seeds, each a dram*; *Broom-seeds half a dram, Orris a dram, the four great cold seeds, each a scruple*; make a pouder, give *two drams*,

Clysters suddenly take away pain, by taking out the Excrements and Wind, which would increase it, by pressing upon the Ureters and Reins: And also by coming to the part being anodyne, and if they be narcotick especially, and which break the stone. Then do they help in a threefold respect.

As this against the Stone. Take *the emollient herbs, roots and all, Pellitory, Bettony, Groundsel, Beets or Mercury, each a handful*; *Chamomil, Melilot and Dill-flowers, each a pugil*; *Liquorish two ounces, red Pease, Bran, each a pugil*; *Figs ten, Bay-berries three drams, Alkekengi-berries two drams, Gourd, Fænugreek and Linseed, each half an ounce*; *Fennel and Caraway seeds each a dram and half*; boyl them in *Water and Wine, or Broath*, strain and add *Honey or sugar an ounce and half, Cassia an ounce, Benedicta or Hiera two drams, Oyl of sweet Almonds, Nuts, Olives or Butter, each an ounce*; *Turpentine two drams*, with *Salt* make a Clyster. If the Pain be great, add *two drams of Philonium Romanum*.

Or you may use the anodyne Clysters for the Colick, adding things proper for the stone. Or thus: Take *Oyl of Chamomil, Dill, Lillies, sweet Almonds, each an ounce and half*; *Oyl of scorpions, Goose grease and sweet Butter, each two ounces*; *Turpentine* dissolved with *the Yolk of an Egg, an ounce and half, Saffron a dram*, with *Milk* make a Clyster, add *Opium half a scruple*, if there be need.

Or this: Take *Turpentine two ounces*, dissolve it in *white Wine half a pint, with the Yolk of an Eg, Oyl of Butter, Almonds two ounces, Oyl of scorpions an ounce, Goose-grease two ounces*.

Or this to help the stone to pass foreward. Take *Lilly roots two ounces, Lapidilon, Smallage, Purslane, Roots and all, each an ounce*; *Pellitory, Coleworts, Groundsel, saxifrage-roots and all, Bettony, St. Johns-wort, Water-parsley, Crateva, Fennel, Dovefoot, Columbines, Beets, each half a handful or a handful*; *Lillies, Broom, Elder, Lavender and Stœchas flowers, each a pugil*; *Juniper-berries an ounce, Alkekengi-berries two drams, Gromwel, saxifrage, Parsley, Smallage, Cummin, Hally-berries and seeds, each a dram*; boyl them in *Wine and Water*, strain and add *juyce of Pellitory, St. Johns-wort, Fennel or Parsley, each an ounce*; *Benedicta laxativa or Indum majus three drams, Oyl of Dill, bitter Almonds, Peach-kernels, scorpions, each an ounce*; *Turpentine* dissolved with the *Yolk of an Egg two drams*, with *salt* make a Clyster. Add the Electuary called *Justinum or Lathontriden*.

Alterers are given also to cleanse away Gravel, that it stick not to the Reins, nor grow to the stone, they are good to prevent and cure, they open the streight passages where the stone is lodged, and make them slippery And break the stone if it be crumbling or fastned to the Reins, but if it be old or flinty, it cannot be. Some do it by a cutting quality, and sharpness, or by cleansing which takes the Gravel from the Kidneys, and somewhat alwaies from the stone; and the rather, when they are drying and earthy, which they do not by their hardness, as one stone wears another as they suppose. for they are not given whol but finely poudered, but by the clensing quality which is in these dry bodies; and by a propriety known more by custome then reason, as in other things, which do it by their similitude of which hereafter.

Good broath of red pease is approved, with Butter, Sugar, and Honey, or a little Salt. this is used to prevent, adding parsley roots, and Coleworts and topps of Sparagus, with Beans and Fitches.

Or Take: *Red Pease a pugil, Parsley roots two ounces, Fennel, and Rest-Harrow roots and Liquorish each an ounce*; *Colewort or Malowes, a few Melon seeds two drams, Anise a dram*. boyl them in *Cock Broath*, til there be two messes of it streined, give it Morning and Evening.

Or the Decoction of *Alisma, Chamomile, Marsh-Mallows, and of Corn Poppy*, according to *Dioscorides*, is good for such as make thick sandy Urine. Or the Decoction of white Saxifrage.

To this Decoction of white Saxifrage, Orris, Primrose roots, Mallows, Venus Navel, and Holly, are added, also roots of Valerian, Musk; and wild flax may be boyled with Wine.

Some say that the Decoction of Lignum Vitæ is good against the stone, by its cleansing and cutting quality. And therefore they give it in the fit, and to prevent also, as ordinary drink for a long time together, with other clensers sometimes, as Liquorish roots, Rest harrow, and the wood of the Thorne Tree, with Sugar, or Honey.

Of these and others make this gentle and pleasant Decoction. Take *Liquorish an ounce and half, red Pease a pugil, Raisons ten pair, Figgs five pair, the four great cold Seeds, Anise and Mallow-seeds, each a dram*; *Violets and Mallow-flowers, each a pugil*; boyl and strain them, add *Sugar or Honey* a sufficient quantity for two or three draughts.

This is stronger; Take *Marsh-mallow roots, Liquorish, each an ounce*; *Mallow-flowers two handfuls, red Coleworts, Chervil, Bettony, each a handful*; *Melon seeds two drams, Fænugreek or Linseed a dram and half, seeds of Parsley, Alkekengi and Gromwel, each a dram*; *Chamomil and Broom-flowers, each a pugil*; boyl and sweeten it, and use it as the former.

Or thus: Take *Roots of Asparagus, Restharrow, low Bramble, each an ounce*; *Pellitory, Bettony, Poli-montain, each a handful*; *black Vetches a pugil*, boyl them in *Rain-water*, add *Vinegar of squills an ounce, Goats blood prepared half a dram, Lapis Judaicus a dram*.

Or this Syrup: Take *the five opening Roots, each half an ounce*; *Liquorish, Marsh-mallows, Dropwort, Burnet, saxifrage, Restharrow, Ground-bramble, Horse-radish, each an ounce*; *Roots of Valerian, Dittany, Madder, Nettle, Bayes, Orris, Elicampane, Birthwort, Piony, Vervain, each half an ounce*; *Roots of Asarabacca, Cypress, each two drams*; *Seanoyen a dram, Roots of white Saxifrage, inner Rind of Hazel and Elder, each half an ounce*; *Mallows, Pellitory, Chervil, Lovage roots and all, Saxifrage of* Dioscorides (which *Dodon* takes to be wild Time) *Bettony, Pauls Bettony, Maidenhair, Ceterach, Rupturewort, Bupleurus, Ground-Ivy, red Coleworts, wild Parsley, Sea-fennel, Celtick-nard,*

each a handful; *Flowers of Chamomil, Lillies, Broom, Wall-flowers, St. Johns-wort, each a pugil*; *red Peaſe a pugil, Peach and Cherry-kernels, each an ounce*; *Juniper, Winter-cherry and Ivy-berries, each half an ounce*; *the four great cold ſeeds and of Mallows and Marſh-mallows, each a dram*; *the four great and ſmall hot ſeeds, each half a dram*; *Fenugreek and Linſeed, each a dram*; *Raiſons ſtoned two drams, Jujubes and Sebeſtens, each five pair*; make a Decoction, add to the ſtraining *Sugar or Honey ſix ounces*, with *a little Cinnamon* make a Syrup: Take *two or three ounces alone, or with convenient Water or Wine*. Some boyl *Lapis Judaicus* and *Lyncis* in it, but in my Iudgement to no purpoſe.

Or the opening and cleanſing Syrups, which are ſeldom given alone but with Powders and Electuaries that expel the Stone, as, Oxymel Hydromel, Syrup of Liquoriſh, Radiſh, or Byzantine.

There is alſo an Infuſion made of Wine to expel the ſtone, as winter Cherries, bruiſed and ſteept in Wine.

Or bruiſed Radiſhes, or Horſ-Radiſhes ſteept twelve houres in Wine, which is very good.

Dioſcorides commends Wormwood-Wine againſt the Stone.

And this is better; Take *Liquoriſh, Reſt-harrow, Burnet, Saxifrage, Lovage, Fenel, Radiſh, each an ounce and half*; *Bettony, and Pauls Bettony, Rupture-wort, Bupleur, Maiden-hair, Ground-ivy, all dried, each three drams*; *Violets, Dillflowers, each a dram*; *Winter Cherries, Ivy berries, each two drams*; *Parſley, Carua, Gromwell, and Broom-ſeed, each a dram*; bruiſe them, and infuſe them in two quarts of Wine.

Groundjvie infuſed in Aqua Vitæ, is a ſingular experiment againſt the Stone.

Or divers Aqua Vitæ's made of Herbs, and other things proper againſt the ſtone.

Or a Lixivium, or Lye, made of aſhes of the ſame is good in four ounces at a time.

As of Vine aſhes, or Bean ſtalk aſhes, when Water or Wine is poured through them, ſo often til it be ſharp.

Another ſtrong enough in half an ounce. It is made of the Aſhes of Bean-ſtalks, Peaſe, Coleworts, Vervain, Wormwood, Garlick, Ivy, Iuniper, Bayes, and Paliurus, if it may be had. Taking as much of them as you can hold in your hand, and letting a pint of Wine, and four ounces of Aqua-Vitæ paſs nine times through them.

Some Juices break the Stone. (as *Hannibal* did the *Alps* with Vinegar) as thin white Wine, and Vinegar, and Water.

A certain man was drunk with white Wine, and held his Water forceably, and then voided abundance of ſtones and Gravel. And another of our Citizens of a good family, by drinking the diuretick Wine in the *Blaſine-ſtreet*, voided often ſtones of half a dram in weight, and hath ſhewed to me many of them which came forth with a little pain.

Hollerius teacheth us that the ſame may be done by much cold water, when the body is hot and dry from the pain, and it is better with Vinegar, alſo the ſpaw-Waters that are ſharp, are drank many dayes together againſt the ſtone.

Or an ounce of juice of Limons alone or with Sugar, or with three ounces of Wine, alſo juyce of Oranges, and the like.

Or the juice of winter Cherries, and Yarrow, or the Water of a Beet ſtalk, taken often in the ſame quantity, according to *Mathiolus*.

Or Take *Iuice of Fennel and Purſlane, each half an ounce*; *white Wine an ounce*. Drink it with ſugar, or make a ſyrup thereof.

Or this Potion; Take *Juyce of Pellitory clarified, an ounce and half, of Chamomile, Bettony, Honey, or Sugar each an ounce*, drink it with Peaſe Broath or the like, or make a ſyrup thereof.

Another, Take; *a Horſe-Raddiſh, bruiſe it add the beſt Wine to make it three ounces, or four, ſtrain it and add Blood of a Goat prepared a dram*. This is highly commended, to which other Juyces and Pouders may be added.

The Urine of a Goat of four yeers old, or of a rock-Goat, is highly commended.

Alſo diſtilled waters which pierce to the Reins, in a good quantity as Pellitory water a pint, or Mallow, or Marſh-Mallow water, or of Broomflowers, or Bean flowers, Reſt-Harrow, Aſparagus, Saxifrage, Parſley, Fenel, Oſyris, or that of wild Parſley, ſea Fennel, Raddiſh, Ivy berries, or winter Cherries, or that of Flixweed called Oſyris, or of Oak leavs, and Leavs and Roots of Brambles, and of Dogs tongue, alſo of ceterach, Vervaine, Chamomile, or that of Peach kernells or that of Turpentine which is oily. *Mathiolus* commends the Water of Mans Dung or Pigeons Dung. The ſpirit of Wine which is thin, breaks the Stone.

Theſe all may be given alone, or with ſugar, or with other Pouders, or diſtilled of divers ſimples mixed together.

Or thus; Take *the Roots, Herbs, Seeds*, of which we make the *Wine* by Infuſion, all dryed and bruiſed, and ſo much *Wine*, as it may be like a *Pultes*, and four ounces of *Turpentine*, draw a water by diſtillation from it: give it as the other.

Or add to the dryed ſimples that will keep their Virtue, Roots of *Spargus, Smallage, Parſley, each halfe an ounce*; *roots of Aſarum, Maddir, Valerian, each two drams*; *Pellitory of the wall, St. Iohns-wort, Chamomile, and Broom flowers, each two drams*; *Smallage, Lovage, Sparagus, and Raddiſh ſeeds, each a dram*; diſtill a water with *Turpentine* as before.

All theſe are better diſtilled in *Aqua vitæ*.

Or Thus; Take *Peach or Cherry kernells, two ounces, Berries of Brambles, Strawberries, Winter Cherries, Ivy, each an ounce*; *Horſ-Raddiſh three ounces, green Beans with the ſhales, Pellitory, each an handfull, wild Parſly, Sea Fennell, each a pugil*. bruiſe and diſtill them.

Or this; Take *of Peach kernells, four ounces, Sebeſten, and Jujubes, each five pair, four great cold ſeeds, ſix drams, Winter Cherries, half an ounce, Gith, and Smallage ſeed each two drams, Horſ-Raddiſh, half a pound*, bruiſe them, add *Turpentine and Honey each a pound*, diſtill a Water, give *three ounces alone*, or with other Breakſtone-Medicines.

Or, diſtill this Water of Juyces; Take *Juyce of Raddiſhes, Lovage, each ſix ounces, Juyce of Winter Cherries two ounces, white Wine Vinegar two ounces*, diſtill them give half an ounce.

This is an admirable Water: Take *juyce of Radiſhes a pint and half, of Reſtharrow and wild Tanſey, Saxifrage, Winter-cherries, Pellitory, Burnet, Bettony, Marſh-mallows, Gromwel, each half a pint, Roots of Fennel, Parſley, Eryngus, Reſtharrow, Orris, Elicampane, each two ounces*; *Baſil, Gromwel, Burdock and Parſley-ſeeds, each half an ounce*; *Juniper berries bruiſed half a pound*; infuſe them, and ſtir them often two dayes, add *a pound of Honey, and a pound and half of Turpentine, white Vinegar two ounces*, diſtil them in *Balneo*, give *two ounces, or two and an half*, with as much *ſyrup of Violets*.

It is good to drink Oyls; for we may ſee them ſwim after upon the Urin, and therefore know that they paſs through, and ſupple the Ureters.

Therefore in great Pains, when the ſtone is ſtopped in the paſſages, give Saller-oyl, or Oyl of ſweet Almonds, or Linſeed new drawn or well waſht, alone, or in Broaths or Cream.

Some commend an ounce of Sallet-oyl with Wine, wherein Flints have been often quenched.

But some Oyls are proper for the stone, alone given, or with other remedies, as Oyl of Peach, or Cherry-kernels, or of bitter Almonds, or of Scorpions; or that of Citron-seeds, or Dock-seeds; or of chymical Oyls given by drops with others, as that of Turpentine, or the fix Liquors of Calcanthium, or Vitriol called Spirit of Vitriol.

Or this compounded: Take *Juniper-berries four ounces, bark of the Roots of Ash three ounces*, beat them, add *Turpentine two ounces, Honey an ounce*, steep them and ad *Water*, and so distil an *Oyl*: Give *six or seven drops* with any convenient Liquor.

Some Simples are good taken in substance, Raddish and Salt in Sallets, Horse-raddish beaten with sweet Almonds, Roots of Lovage boyled or raw eaten in a good quantity before bathing. Roots of Fennel, Parsley, tops of Sparagus, Hops, Coleworts, Purslane, wild Parsley and Water-cresses in Sallets, Sea-fennel pickled called *Samphire*; also Lemmons, Raisons, Figs or kernels of Peaches, bitter Almonds, Cherries eaten with sugar, or made into Comfits. Also the Fruit of sweet Briar called *Hepps*, Hares flesh, especially the kidneys, or Sparrows or Wag-tayls roasted, or Goats blood boyled or five or six ounces of Fox blood, with wine and sugar which is highly commended.

Some Simples of a Rosin quality pierce and cleanse the Reins, and make the Urin sweet as a Violet, and expel the stone and gravel in time of the fit, by provoking Urin, as the best Turpentine alone not washed two drams and half in a Wafer, or with Liquorish, Pouder or Sugar; and it is better dissolved with the Yolk of an Eg, and given with convenient Liquor; or boyled till it may be poudered, two drams.

There are many other Simples for the same given in Pouder, in Wine, or the Waters mentioned, as Dittany-roots, Bayes, Knotgrass, Rupturewort, Buphleurus called the Hares-ears, the seeds of Paliurus, Gromwel, Broom, Xanthium, Winter-cherries and Ivy-berries.

And pouder of Goats blood thus prepared. Take *the blood of a young Goat fed with Herbs* good against the stone, neither that which comes first or last, but in the middle of the bleeding, preserve it from putrefaction by a gentle fire, or by the sun, and give *a dram in pouder with Wine*. The blood of a Hare is as good.

Or the ashes of a whole Hare-skin, and all a spoonful in Wine

Or the ashes of a Wag-tayl.

Or these stronger Pouders of scorpions, sows or hog-lice, pouder of Earth-worms or ashes, which are very strong, and must be given warily, and in a small quantity; or of Grass-hoppers, Beetles, pouder or rather ashes of Spanish-flies, or of those Hog-lice or sows called *Oniscs*, which *Hartman* so commends in his Practise of Chymistry.

Or the fine pouder of *Lapis Judaicus*, or half a dram of *Lapis prunellæ*, with the thin water of Vitriol, given twice a week in the morning. This is a great secret among some.

Besides these, there are many Pouders and Electuaries and Pills, made of Roots of white Saxifrage, Burnet, Saxifrage, Dropwort, Restharrow, Valerian, Horse-raddish, Madder, Nettles, Lovage, Fennel, Parsley, Grass, Knecholm, Sparagus, Bramble, Asarabacca, sea-onyons, Orris, Elicampane, Birthwort, Piony, Dancasonium, Horse-dock, Acorn-shells, middle Rinds of Hazel, the saxifrage of *Dioscorides* (called *Serpillum* by *Dodon*) the Capillars, Celticknard, Bay and Colewort-leaves, Feaversew, Ground-Ivy, Penny-royal, Organ, Polymontain, Calamints, Hysop, Southernwood, Germander, Bettony, Pauls-bettony, Groundpine, Leaves of Oak and Willow, Scordium and Empetrum, the Flowers of Royal Comphrey, Chamomil, seeds of Fennel, Anise, Caraway, Cummin, Smallage, Dill, Carrot, Sesely, Parsley, Lovage, siler-mountain, Ameos, Parsley-pert, Coriander, Asparagus, Knecholm, Basil, Raddish, St. Johs-wort, white Thorn, Nettle, Ash-keyes, Gith, Water-cresses, Burnet, Saxifrage, Lupins, Vetches, Bay and Juniper-berries, Medlar-stones, Peach and Cherry-kernels, sweet Almonds, red Pease, the spunge in the sweet Bryar, Cherry-tree and Plum-tree, Gum, Gum of the Walnut-tree, Vine, Gum Arabick Traganth, Elemi, Olibanum, Bdellium and Amber. Also the ashes an an Hedghog, Swallow, Asses-liver, Doves-feathers, and pouders of a Hares-kidneys, Mans-skull, Horse-hoof, Astragalus or Hare, Ivory, Picks or pickerel Jaws of Crayfish and Snails shells; or of Eg shells hatched; or of stones in Cray-fish, Crabs, spunges; or of stones taken from men, commended by *Paracelsus*, and Oyl of them taught by *Hartman*: Also pouder of Mouse dung. And of Lynx stone. Ocher the third Alcyon of *Dioscorides*, and ashes of Glass. To which we add things to enlarge the passages, as Liquorish, Marsh-mallows, Venus-navel, Violets, seeds of Mallows, Cotton, Marsh-mallows, Fœnugreek, Linseed; the four great cold Seeds, sweet Almonds, Pistakes ashes of Nuts and Gourds. And things that help concoction, and expel wind and obstructions, and spices that expel the stone, and make the Medicines pleasant; as Ginger, Galangal, Calamus, cypress, cinnamon, Wood-cassia, Wood-aloes, red Sanders, Nutmeg, Mace, cloves, Pepper, carpobalsom, cubebs, spike, schænanth, saffron.

Give of these mixed a dram or two, with Wine, Water, Lve, Decoctions or Infusions; or with sugar make gross Pouders or Lozenges, with Gum Traganth, or with Honey or Syrup make Electuaries, with other conserves or candyes, given from two to three drams. Or if they be unpleasant make Pills with Turpentine, and give a dram, and after them give a convenient Draught of proper Liquor to help their working. Examples of Pouders, Pills and Electuaries, are these.

The first pouder: Take *dryed Coleworts a dram, Oak-leaves dryed and Acorn peels, each half a dram; Pepper and Ginger, each a scruple*; make a pouder, give *a dram or a dram and half.*

A second: Take *Peach kernels parched half an ounce, Melon seeds two drams, Fennel seed a dram*: Give it with *Parsley-broath.*

A third: Take *Gromwel seed and Winter-cherries, each a dram; Parsley seed half a dram*: Give it in *five ounces of Lemmon-water.*

A fourth: Take *Broom seeds half a dram, Amber two scruples, Sugar candy a dram*: Give it with *Wine.*

A fifth pouder: Take *stones of Medlars a dram, Pickrel-jaws half a dram, Lovage seed a scruple*: Give it as the other.

The sixth: Take *Crabs-eyes and Astragalus, each half a dram; Broom and Basil seed, each a scruple*: Give it at once.

A seventh: Take *of the stones that have been voided by the same Patient or others, and Lapis judaicus equal parts*, make a fine pouder: Give it with *Hydromel* or *Water of Sea-fennel.*

The eighth: Take *the ashes of a Wag-taile or Hare a dram, Eg-shels hatched two scruples, with Sugar and Cinnamon*, make a Pouder.

The

The ninth: Take *boyled Turpentine half a dram, Pouder of Earth worms a scruple, burnt Harts horn two scruples, Lapis Iudaicus a scruple, Gum Traganth half a scruple.*

The tenth: Take *Goats blood prepared a dram, Jews stone half a dram, Ashes of Earth worms a scruple* give it as the other.

The eleventh: Take *Goats blood prepared or ashes of a Hare two drams, or of each a dram; the Spunge stone and Jews stone, each a dram and an half; Fennel, Parsley, Annis seeds, Gromwel seeds, Medlar stones, each a dram; water-cresse seeds half a dram, Mellon seeds a dram, Liquorish half an ounce, Roots of Burnet, Saxifrage half a dram, Cinnamon a scruple, sugar two ounces* make a pouder, give *a spoonful or two*; drink after it some convenient Liquor.

The twelfth: Take *Liquorish three drams, Rest-harrow, Dittany, Bays, Horse-radish, Burnet, Saxifrage and white Saxifrage, of each two drams: Asarum, Orris roots, each a dram; Dodms, Saxifrage* called *Serpillum, Maiden-hair, Bupleurus, Rupturewort, Pennyroyal, each a dram and an half; Fennel, Seseli, Parsly, Lovege seed, Sea fennel, Radish Basil seed, of each two drams; Watercresse and Gith seed, each a dram; Medlar stones a dram and an half: Peach kernels two drams, Plum tree Gum two drams, Crabs Eyes, Pickrel jaws, Egg-shels, Wolves Liver prepared, each a dram; Jews stone and Spunge stone, each a dram and an half; Oker and burnt Glass, of each half a dram*: give it as the former.

A thirteenth excellent Pouder: Take *Mouse dung five or seven, Olibanum a scruple, Fennel seed half a dram, Cinnamon a scruple.*

A fourteenth stronger: Take *one Grass hopper of half a scruple, Crabs eyes two scruple, Cinnamon a scruple,* give it with the Decoction of *Juniper berries.*

The fifteenth yet stronger: Take *dryed Spanish flies four, Spung stone two scruples, Melon seeds a dram and an half, Sugar candy a dram,* give it with the Decoction of *Linseed or Whey.*

The great Electuaries of *Nicolas, Lithontribon, Ducis or Justinus*: are made of these, and that of *Arnoldus de Villa Nova*, and that called *Nephrocathartike* and *Philanthropos*, and the Diuretick of *Baptista* and *Montagnaria.*

There is also an Electuary called the *Queens* Electuary, which hath Senna and Turbith in it.

And a red Pouder make thus: Take *red Sanders and Cinnamon, each an ounce; Annis, Fennel, Parsley, Gromwel, Creta of the Sea, Winter-cherries, Melon seeds, of each two drams; Spunge and Jews stone and Lynx stone, each a dram; blood of a Goate prepared half a dram.*

The Electuary of Ashes, by *Avicen* is prepared for the stone. Thus: Ashes of Glass, Spunge and Jews stone, Scorpions, Hare, Egg-shels, Pouder of Goats blood, Ashes of Coleworts, Calamus, Penny-royal, Parsley seed, Carrot, Marsh-mallow seeds, Pepper, Wallnut tree, Gum and Gum Arabick made into Pouder and with Honey into an Electuary.

This hath been often used by me with good success: Take *Liquorish, Bay roots, of each two drams; Rest harrow roots a dram, Winter-cherries, Paliurus seeds, Gromwell, of each two drams; Smallage, Parsley and Fennel seed, each a dram; Water-cresses half a dram, Gum of Cherry or Plum tree and Amber, each a dram*; make a Pouder, with *Cinnamon and a little Sanders*: and to mitigate pain, *Henbane seeds a dram and an half*, give *a dram with sugar* or make Lozenges, or an Electuary, or Pills, with *syrup* that is proper, with *Peach kernels* and *juyce of Liquorish*, instead of *Liquorish.*

With Conserves, you may mix them thus: Take *Conserve of smallage roots or Orris an ounce, Conserve of Broom flowers and Maidenhair, each half an ounce.* The tenth, twelfth or thirteenth Pouder. Or the Electuary *Ducis, Justinus or Lithantribon a dram and an half.* Or if you will have it stronger, the fourteenth Pouder and juyce of Liquorish, *each a dram*; with syrups aforesaid: make an Electuary.

Agarick is somtimes added: Take *Agarick a dram, Pellitory of Spain two drams, roots of Dropwort a dram, Gromwel seeds half a dram, Madder half an ounce, conserve of Maiden hair half an ounce, with Honey of Violets*: make an Electuary.

Convenient Pills: Take *seeds of Paliurus, Gromwell, Winter Cherries, each a dram; Saxifrage seed and Sea fennel, each half a dram; Mallow seeds two scruples, juyce of Liquorish a scruple, Gum of Cherry and Plum tree, each half a dram; Bdellium a scruple, Goats blood prepared a dram, ashes of Scorpions, or Mouse heads, Earthworms, Hog lice or Sows, each half a dram; with Turpentine*, make Pills, give *a dram.*

For pain, give Anodynes with the former.

An Emulsion: Take *Peach kernels four ounces, Melon or Gourd seeds half an ounce, white Poppy seeds two drams*, beat them, *and with half a pint of Pellitory or Mallow water*, make an Emulsion with *Sugar or Honey*, give *four ounces.*

A pouder again pain: Take *white Poppy tops two drams, Henbane seeds a dram and an half, the four great cold seeds and Mallow seeds, each a dram; Gromwel seeds and Winter Cherries and Broom seeds, each half a dram; Liquorish two drams, Restharrow roots a dram, sugar two ounces.*

It is good in pains to add *white poppy seeds or Henbane seeds*, as I shewed in my pouder.

Or to give Opiats, as *Asyncriton, Philonium, Romanum*, with pouders against the stone, or others mentioned in the Colick.

And Narcoticks may be given with purgers: As, Take *Asyncriton or Philonium Romanum two scruples or a dram, Diaphœnicon a dram and a half or species Benedicta a dram and an half or six grains of Diagredium with sugar* make a Bolus.

Or thus: Take *senna half an ounce, Carthamus seeds two drams, Liquorish, parsley roots, each half an ounce; white poppy seeds two drams, Mallows and Linseed, each a dram*; boyl them and dissolve *Asyncriton or philonium a dram, Mithridate two drams, or half an ounce of syrup of poppies.*

Or these pills: Take *species Laxativum two scruples, Opium prepared* and dissolved in *sack two grains, Storax, saffron, Castor, each three grains; Oyl of sweet fennel seeds a drop with Turpentine*, make pills.

We give Anodynes in Clysters also, as in the Colick.

And outward things to remove the stone, by dilating the passages.

Sitting in a moist and hot Bath takes away pain, if up to the Armeholes, in a Vessel made on purpose called *Lumbrorium.*

In time of necessity, hot water alone will do well and better then potential heat, to take away pain, though things potentially hot, may be added to help the Decoction, and which loosen, expel wind, open and move the stone, such as Clysters were made of.

Or these, a Decoction of Mallows and parsley and Chamomil flowers in a straight Vessel, the less will serve.

Or adding Lilly roots pellitory and Violets.

Or a Decoction of Coleworts, Spinage, Arrage or Turneps

Turneps, or Parsneps, or Scirroots, and Horse-radish, which is best.

Or of Marsh-mallowroots, opening Roots, and all three pugils, Fœnugreek and Linseed a pugil, Smallage, Parsley and Caraway seed an ounce.

We add to the former some stronger things to expel the stone, which are mentioned in Remedies taken inward, and may be used outwardly, to remove it as some think.

Chiefly Madder roots, and sea-fennel, or Sisymbrium, Columbines, Dropwort, Dovefoot, Bupleur, southernwood, Mugwort, Broom flowers, and of Verbascum, Gromwel seeds and Winter-cherries, and the like.

For rich people we add Milk, Oyl, Butter to loosen more, and Wine to make it penetrate.

We make Fomentations (when baths cannot be used) of the Decoctions aforesaid, with a spunge, stuphes or bags, with Wine and Oyls.

Some use Embrochations or Infusions upon the pecten if the stone lodge there, to remove it; they are made of the aforesaid Decoctions.

Also to bath in, and to drink of sharp Waters, is good against the stone, as those of Sulphur.

After Bathing or Fomentation anoint the Reins, Privities and Perinæum, to take away pain, and open the passages warm, stroaking the Hand downward.

If there be heat of the Kidneys, this Oyntment will open and cool. Take *Oyl of Violets and Water-lillies*, boyl *Marsh-mallows therein, fresh Butter, or Cream and Goose grease, each half an ounce*; with *white wax* make a Liniment.

A stronger Anodyne: Take *Oyl of sweet Almonds an ounce and half, Oyl of Chamomil, or Melilot, Dill and wall-flowers, each half an ounce; Conies grease six drams, Mucilage of Linseed or Fleabane an ounce, Saffron a scruple*, with *wax* make a Liniment.

Or anoint with the Oyntment of Marsh-mallows, or that called *Resumptive*.

When we will drive along the stone: Take *Oyl of bitter Almonds an ounce, Oyl of Peach kernels half an ounce, Oyl of Scorpions and Goose grease, each half an ounce; Turpentine a dram*, with *wax* make a Liniment.

With Juyces thus: Take *juyce of Pellitory and Marsh-mallows, each an ounce and half; wine an ounce, white wine-vinegar half an ounce, Oyl of wall-flowers and Earth-worms, each an ounce; Oyl of Scorpions half an ounce*, boyl them to the consumption of the Juyces, ad *Goats grease six drams*, and with *wax* make an Oyntment, or with *Turpentine*.

Another stronger: Take *Oyl of Lillies and bitter Almonds, each an ounce and half; juyce of sea-fennel, Horse-raddish and white wine, each an ounce*; boyl them and ad *Grass-hoppers, or quick wood-lice, Spanish-flies, Scorpions dryed twelve, or more*.

Or thus: Take *Oyl of bitter Almonds, of Peach, or Cherry-kernels two ounces, Oyl of Scorpions, or burnt Grass-hoppers half an ounce*, with *wax* make an Oyntment.

A more compound Oyntment. Take *Oyl of Chamomil, Dill, Lillies, each an ounce; Oyl of bitter Almonds an ounce and half, of Scorpions an ounce, Goat and Badgers-grease, each half an ounce; Mucilage of Fœnugreeck seed an ounce, Madder and Asarum roots, each a dram; water-cresses, Raddish and Lovage seeds, each half a dram; Myrrh a dram, ashes of Grass-hoppers, or Beetles two scruples, ashes of Beech mast a dram, saffron half a scruple, Oyl of Amber half a scruple*, with *wax* make an Oyntment.

Trallianus commends the blood of a Goat newly killed to anoint.

This Cataplasm is good to the pained part. Take *roasted Lilly roots half a pound, of Pellitory of the wall heated upon the Tiles and bruised two handfuls, and of Groundpine so prepared three drams, Marsh-mallow roots bruised two ounces, Chamomil flowers and Dill tops, each a pugil; Flower of Fœnugreek and Linseed, each an ounce*; boyl them in *milk*, add *fresh Butter two ounces, Oyl of Lillies and Scorpions, each an ounce; saffron a scruple*, make a Pultis.

Also the actual Heat of Bags made of dryed simples, or Chaff of Milium is good here, as in other pains.

Also Pillows, and Skins, or Furrs, Coney-wool, and Hares skins are the best.

Also some Stones tyed about the Waist prevent the stone. Great folks by a greenish stone like the Galactites. It is called the *Nephritical Stone*, because it expels stones from the Kidneys, and also strengthens the Stomach.

It is good to apply a Cupping-glass, not upon the Kidneys, least it stir the stone, and cause pain which is not great, till the stone gets into the Ureters, and then apply the Cupping-glass still a little below the stone, and so remove it downwards, beneath the place of the pain, till you have brought the stone into the Bladder.

The same may be done by chafing with the Hand or with Cloaths, and hot Oyls that loosen. Especially after so doing you use a Cupping-glass, alwayes taking heed that we go not too high with these things to the part pained, which will increase pain.

Some rub the Leggs in time of bathing.

Moderate motion also keeps the sand from stopping in the passages; and it is good to stand upright, or to exercise a little to move it.

And if a stone from the Kidneys stick in the entrance of the Ureters, and cause pain, it is good to lay the leg so high that the stone may get back by a little motion, into the hollow of the Kidneys, this will soon take away pain.

Vomiting by its force in straining, doth help to remove the stone, therefore at the first if it come not Naturally provoke it, or provoke Neesing.

It is good in great pain, when the Patient is plethorick, to open a Vein in the Foot on the same side, least it run to the Kidneys by reason of the pain, and cause Inflammation, or when there is Inflammation.

The cure of the pricking pain, called the Spleen but falsly.

The pricking pain which is vulgarly called the Spleen, though it be sharp, yet because it comes from a cause that lasteth not long, as attraction of the Muscles and Wind, it goes away of it self, otherwise it must be cured.

If it come often or from little motion, rest preventeth it, and gentle Motion, and good Diet, not windy, but such as expelleth wind, and by keeping the side very warm. And if the Party must exercise or ride, let him not do it upon a full stomach, and then bind himself about the waist with a Swathband.

When this pricking pain comes, also it is good to bind, with a Rouler as in a windy Cramp, of which this is a sort, and by so doing the Muscles will be drawn into their place, and the pain removed by expelling the wind.

If after rest and binding, or rouling, the pain yet remain, you must use the same way of cure; as was shewed in the Cure of a windy Pleurisie.

First, use outward things that are hot actually and potentially that expel wind, and take away pain, as Fomentations, Bags, Oyntments, Plaisters and Baths dry and sweating, such as are described in the windy Pleurisie, and other outward Diseases from wind.

If for all these the pain abate not, you must use divers

verters and Derivers, as Clysters and Cupping-glasses. And (as is there shewed) if the Body be foul, you must purge, provoke Sweat, and give Alterers, which by a hidden quality take away pricking-pain.

CHAP. XIII.

Of Pain of the Belly.

The Kinds.

WE call that the Pain of the Belly which is before, where it is soft and covered with no bones; for we shall speak of other Pains in the parts adjacent, that are in Pissing and going to Stool, hereafter. These in the Belly are first distinguished by their Seats, for some are in the Abdomen or Panch about the Navel; others below the Navel, or above the Pecten, or reach to the Hips and Loins.

Colick and Iliack-pain. There are pains often about the Navel. These are distinguished by Physitians according to the Gut affected, as we shall shew in the Causes, and one is called the *Colick*, another the *Iliack-pain*. These are the Symptoms.

Torments. The great pains are called *Torments* they are sometimes about the Navel, above or below, or on each side; sometimes they move with heat burning, and sometimes cold; sometimes they are fixed under the Navel chiefly, and do as it were bore a hole through, but not in the Back, Groins as the Nephritick pains of the stone, or in the Hips, as those of the Womb.

There is also Rumbling of the Guts to and fro to be heard and felt.

Also the belly is bound, and sometimes there is an endeavor to belch or fart, but in vain. And if not, or a Loosness follow, the Disease is cured. Sometimes there follows a purging of matter but not of blood, as in a Dysentery. In one sort of this Disease the urin is stopped.

There is also Loathing and Heart-ach called *Cardialgia*, and Vomiting of Flegm or Choler, sometimes of the Excrements which is grievous.

Miserere mei, a sort of Iliack-pain. this Disease is called *Iliacus* from the Gut Ilion, or from the Greek *Eleos* or *Eleenes*, because it deserves pitty, and therefore called in Latin *miserere mei*.

There is sometimes also a Feaver going afore or comming after, or joyned with it.

Sometimes Convulsions and Palsies follow unknown to the Ancients. They are general or in some particular parts, as we shewed in the Hindrance of Motion.

A straining pain about the Bladder. Also there is a vehement pain below about the Pecten. Sometimes

A hot pain about the Bladder. stretching with stoppage of Urin; of which we there spake. Sometimes burning with pricking and tearing, with redness and tumor outwardly, this is called the Inflammation of the Bladder; and then the belly is bound, and Urin stopped, and a Feaver with its accidents, and Dotage also sometimes. After which follows pissing of matter, or hardness of the part.

Pain of the womb. There is another pain below that reacheth to the Hips and Loins, mentioned in the Hypochondriack pain, called the Pain of the Womb; and it is twofold. Either it is stretching in the Belly and Sides, usually in Women before their Courses break, or when they are stopped: And it is like the Colick, so that many times it is taken for it at the first. And it hath many sad accidents that follow in women, as we shewed in Suffocation of the Womb.

There is also a pain of the womb in women with child chiefly in the Groyns, like that of the Hips, only it is felt before and not behind, when the Leg is moved.

The pain after Child-bearing is a kind of womb-pain. There is another pain of the womb in women not in travel, but after child-bearing, not in the Privities, but in the bottom of the Belly, stretching it some hours or dayes, this is called the after birth-pain.

A pain after Child-pain, with Inflamation. There is another burning, pricking, stretching, beating and tearing pain, called the Inflammation of the Womb before and after Child-bearing, it is like that of the Bladder inflamed, only it extendeth larger, with outward redness and tumor, binding of the Belly, and stoppage of Urin, and a Feaver, which leaves behind it a sharp pricking pain, with voiding of matter by the neck of the womb; and hardness sometimes, and Fainting, and other Hysterical accidents: As we shewed in other places.

The Causes.

The Diseases of the Nervous bowels in the Cavity of the Abdomen, cause these pains, that is of the Guts, Bladder and Womb in Women.

The cause of the pain of the Belly from the Guts. The Guts fill almost the whole Belly, and they being very sensible, the pain is great. They are thick or thin Guts, and the pain is distinguished according to the Gut. That which is in the thick Guts which come from the Colon, is called the Colick, that in the Skin is called Iliack. And because the thin Guts are most about the Navel, the Iliack pain is more there. But because the thick Guts are placed about them, and reach from the right side to the left, as high as the Hearts lodge, down to the Fundament, the Colick is chiefly in them. The Diseases of the Guts that cause these pains are stretching or cold, or flegmon Tumor, or burning, or disorder of the Guts, from their place.

Stretching of the Guts causeth pain of the belly. Too much stretching of the Guts, especially with irritation, causeth pain; this comes from excrements and wind, when they fill too much, or stop, and cannot pass.

Plenty of Excrements and wind in the Guts, causeth pain. Sometimes excrements and wind are in great measure carried to the Guts, which fill and stretch, and cause pain; but if the passages are open it lasteth not, but goes away with rumbling, farting, belching or purging. This pain follows eating of raw Fruits, Crudities and taking of a Purge before it worketh. And it is worse when there is Choler, or other sharp Humors; as we shall shew in Diarrhæa.

Sometimes the excrements and wind stop in the guts, and cause pain, which is fixed sometimes in the part

ſtopped. Or elſe wandereth and is moſt where the Excrements and wind are moſt.

Excrements and wind ſtopping in the windings of the Colon, cauſe the Colick.

This pain is often in the thick Guts, which are full of thick Excrements and wind; as in the great winding of the Colon on the left ſide in the begining of the ſtraight Gut, when the Excrements ſtay in the crooked paſſage, and when they labor to get out the part ſeems to be bored or peirced, and there is a Tumor to be felt and the pain decreaſeth when the Excrements go back, and increaſeth when they return. This ſtoppage is from Excrements, which ſuddenly ſtop this crooked paſſage: or from dryneſs, hardneſs or toughneſs or ſlyminеſs of the ſame; which will not let them riſe up, as we ſhewed in the cauſes of binding of the Belly.

Excrements retained in the cells of the Colon cauſe the Colick.

Alſo in the Cells or hollows on the ſides of the Colon that ſwel forth like a half circle, when the Excrements are hardned and dryed therein, they cauſe pain not only by weight and ſtretching, but by ſtopping and hindering the others from coming forth; Eſpecially if they have lien long. Alſo other hard bodies may do the ſame, if they get in, as ſtones of fruit or Cheſnuts eaten (which have cauſed the Colick to my knowledg) with other hard meats, and binding of the Belly alſo. Alſo little bones taken from Hens Feet boyled, in one that eat many for a Diet, ſtuck long in the Guts of a Woman and cauſed the Colick, and after a Clyſter, ſhe voided abundance of them and was cured. Alſo I knew one that had the Colick from eating much Cheeſe, and voided it by Clyſters, and alſo Mites or Cheeſe worms by Urin. Alſo *Fernelius* ſaith that he hath found by diſſection, that the colon hath been almoſt cloſed up with flegm (if it were not ſome other Excreſcens) and cauſed the Colick. And he writeth that in a certain Embaſſador there was a hard body bored through, in the paſſage of the Colon under the ſtomach, as appeared by the Tumor, which cauſed the Colick, which after ſix years he voided, being a foot long, and then was cured. This may come alſo from ſtones that breed in the Guts, which the ſame *Fernelius* ſaith he hath ſeen as big as Wall-Nuts or Cheſnuts, and voided by ſtool. I once ſaw one Lump like a ſtone, ſo voided.

The Cauſe of the Iliack paſſion, is the ſtoppage of the ſmal Guts.

When the paſſage of the Excrements is ſtopped in the ſmal Guts, it cauſeth the Iliack pain, and this is rather in the ſtraight paſſage over againſt the right Kidney, where they joyne to the thick Guts then any where elſe. Then there is that grievous pain called the Colick vulgarly, both in the right ſide. from the ſtoppage, and in the ſmal Guts about the Navel, from the Excrements, and there is Coſtiveneſs, till Medicines take it away, and it ſo continueth till the obſtruction is quite removed. And if the Excrements retained are Cholerick, or Evil, or Corrupt by long tarrying, and grown ſharp, or malignant, the Guts will be twiched and the pain the greater. And although they ſomwhat provoke nature to void them by their ſharpneſs, yet becauſe they cannot be carried to the thick Guts, while the obſtruction laſteth, the Belly continueth bound, but if the obſtruction did not hinder them they being many, would cauſe a Diarrhæa or the Diſeaſe of Choler, or by ſticking to the Guts a Dyſentery rather then that Iliake paſſion, with coſtiveneſs. This they cannot do in the ſmal Guts, being ſhut up there, but they cauſe cruel pains, till the obſtruction is removed. And from this choler long detained, come other great accidents as Jaundies, Fevers, and ſometimes a Convulſion, from conſent of the Nerves and the like (as we ſhewed) It hapens alſo from the total-ſtoppage of the ſtraight paſſage of the Gut, or from neglect, or from its ſtubbornneſs that will not yeild to Medicines, that the Excrements are ſo gathered, that they return back to the ſtomach, and are vomited up with much deteſtation. Hence is the Diſeaſe called *Ileus* or *Miſereremei*.

The cauſe of this obſtruction, whether it be eaſie or hard to be opened, may be hard tough Excrements; And a natural narrowneſs of the paſſage or a continual uſe of hot things, which dry the Guts and make them narrow there: Or hard meats, or hard bodies that breed there, as we ſhewed. As *Fernelius* ſheweth that a Maid that had taken a Medicine of Quinces was ſtopped found in the ſmal Guts that they break.

Rowling together or tangling of the Guts cauſeth Convolvulus.

If the ſmal Guts are rowled together in any other paſſages, ſo that the paſſage is ſtopt, then the Excrements ſtop and the Wind, and heaped together do ſtretch the Guts, and cauſe the Iliack pain called *Convolvulus*, in which when it is not far from the *Duodenum*, they vomit their Excrements, and there is a wandring pain with rumbling about the Navil. The cauſe of this is Inflammation or wind when alone, or with other Excrements it fils the ſmal Guts, ſo that they are like puddings ſtretched and twiſted, as we have ſeen. This can ſcarſe be from wind alone, except there be obſtructions from the cauſes mentioned, which hinder its paſſage, whereby the Guts are filled and twiſted. Alſo the rowling or tying of the Guts, eſpecially the ſmal from over exerciſe or from a fall upon the Belly, when the Stomach and Guts are full of Meat and Excrements, if it be not carefully cured, will cauſe a deadly *Convolvulus*: as it did in a Couſin of mine, who leaping over a Ditch, fel with his Belly againſt the further banke, and the ſecond day after vomited his Excrements and dyed. In whoſe Body I found the ſmal Guts tied in knots, and ſtretched with wind upwards, but empty beneath, when the Guts were put into their places, the wind broak forth by great farts. Another twiſting may be from the falling of the ſmal Guts out the Cavity of the *Peritonæum* into the Cods in a Rupture, when they ſtay long there and cannot be put up. The ſame Symptoms follow, only the pain is then in the Groyn, where the *Peritonæum* or Caule is broken. As ſhall be ſhewed in Ruptures.

Refrigeration of the Guts cauſeth pain.

Great cold in the Guts cauſeth torments, as in the Stomach. Either from outward cold, or from things taken in actually too cold, for the Stomach and Guts joyning to it, and colon that is adjacent. Alſo Clyſters too cold, actually or potentionally, may cauſe the ſame. The ſame may come from cold wind that comes from cold drink or crudities, which may cauſe pain by ſtretching, alſo if they be many. Alſo from a cold and crude humor, from ſharp meats or fruits.

Although flegm be counted the chief cauſe of pain, yet it muſt be only that which is cold, as that called Glaſſie flegm, which being bred in the Guts, is very cold pierceth and knaws, other kinds of flegm can cauſe no great pain, either with their quantity or quality.

Inflammation of the Colon cauſeth the Colick.

Inflammation of the Ileon, or in the ſmal Guts, cauſeth the Iliake pain, in the Colick or ſtreight Gut

the

the Colick. And there is a fixed, inflamed, stretching, beating pain, inwardly in the part with a Feaver and other accidents of Inflammation, with Costiveness, though when the thick Guts are afflicted, there is a vain Needing. If the smal Guts are inflamed and the tumor is great, then by reason of their rowling together, because nothing can pass, the Excrements are vomited, this is the usual cause of *Convolvulus*, in which Tumor I have observed a little blewness. And if the Inflammation, Imposthume and break, matter is voided.

The Inflammation of the thin Guts causeth Convolvulus.

The cause of this Inflammation is blood sent from the Meseraicks into the substance of the Guts, by reason of its plenty or thinness, or by reason of great pain or other hurt, wound or bruise.

Besides the flegmon or Inflammation of the Guts, there may be a burning in the smal Guts causing the Iliack rather then Colick (though it be commonly so called) which is violent long and hath bad Symptoms, when the choler is not in the space within, but in substance of the Guts, as I know by long observation and certain signs. And it infects them and corrodeth and burneth, as we shewed might be in the stomach and have found upon dissection, by a yellow spot after death both in the Stomach and Guts. This is the cause that the choller staies so long and so fast, and brings such lasting pains, that return, when they are abated and they are worse, when the choller is worse, and is so hot and so much that it causeth Erysipelas. Hence come grievous accidents, because the Guts are very sensible, being Nervous, and the other Nerves suffer therewith, especially when the choler gets to the Backbone and Marrow, where the Guts grow to it by the Mesenterie (as *Fernelius* saith he found it also Convulsions and Palsies, that may come from Choler and evil Humors in the Guts obstructed. From whence, as we may gather, that Choler is the cause, so may we conclude it from other signs of choler in the Urin and the like. And this Choler sticking fast to the Guts, cannot so soon get down, as that which is there from obstruction, and causeth a loosness, as it doth when it gets into the lower parts. Therefore in this case, and in the former from obstruction, though it come from Choler, the Body is not open, as in other Diseases, but bound.

A burning from choler in the Guts, causeth the Iliack passion:

This Choler sometimes coming from the Gall, as it may offend the substance of the Stomach, as I shewtd, so it may also offend the neighbor Guts, to which it is naturally carried. It comes often from evil chyle or two much juyce, and is mixed with the blood in the Meseraicks, being not sufficiently purged in the Gall, by reason of the great quantity and obstructions: when it is carried with the blood to the Guts, through the Meseraicks and Guts into the substance of them, as an Erysipelas. This being gathered and retained in the Meseraicks, causeth divers diseases, and especially feavers (as we shewed) and being sent by nature to the Guts, except it be carried away by a Loosness or Diarrhæa through the mouths of the Vessels (which is usual) or by the bleeding of the Hæmorrhoids, causeth great pains by infecting of the Guts. These pains are joyned with other Diseases, when the Choler is in the Veins; as Iliake passions and other Diseases of Choler and Feavers; as I shewed, in intermitting Feavers.

The Bladder lying in the lower part of the Belly before, causeth pain there, especially when it is ful and stretched forth. We shall speak of the Diseases of the Neck of the bladder elsewhere, For they cause pain in pissing. The Diseases that cause pain in the Bladder, are either distention that is stretching or Inflammation of the same.

The cause of the pain of the Belly, about the Bladder, is from the Bladder.

The Urin is the chief cause of stretching of the Bladder, which when it is in great quantity retained, causeth a pain in the lower part of the Belly, with a swelling and stoppage of Urin, of which we speak in suppression of Urin. This cannot come from wind, because it cannot get into the Bladder, though it may be bred there by the crudity of Urin long retained and cause a greater stretching. This Wind and Urin is seldom seperated, for the frothing of Urin, when it is rendered or made, comes rather from the external Air, then any internal wind. This stretching cannot be from the stone, because it cannot grow so big, neither doth a stone cause pain in the Bladder, till it gets into the Neck thereof. And then because it hindereth pissing, we shall speak thereof in the Chapter of painfull pissing.

The cause of the destending pain of the Bladder is the stretching thereof.

If the Bladder be inflamed in the substance of it, it causeth a pain in the Privities, with redness and tumor, also when the Bladder is wrapped in the Caule, and the tumor is greater, when the Excrements and Urin want passage. This Inflammation sometimes turns to an Imposthume, and then for the time, the pain is yet greater, and when that is broken there is an Ulcer, and painful pissing of matter. Also this Inflammation may leave a Scirrhus, such a one as I saw growing very large, in the Bladder of a Cow, that was broken by accident, and cured again. Also this Inflammation, if it be not well cured, turns to a Gangræne. And I once saw a Bladder black within, when I opened a dead Fryar.

The Inflammation of the Bladder, is the cause of the burning pain thereof.

Some external accident, may cause this Inflammation of the Bladder, or pain from the stone, or an Ulcer to which Diseases an Inflammation is sometimes joyned of the Bladder and Kidneys also, when the body is Plethorick and fit to receive it.

Because the Womb is in the same lower part of the Belly, and lyeth under the Bladder, and the bottome thereof, especially being stretched, reacheth into the Belly, the pains are alike in both. And because the Ligaments of the Womb, by which it hangeth, reach to the Hips and Loyns, they are pained also; and of them we shall here speak, but we have treated of the pains of the Neck of the Womb in its place. But all the pains of the Womb (in the bottom or Body or Ligaments thereof, some whereof reach to the Neck, as in the Bladder) come from stretching or from Inflammation.

The cause of pain in the Womb and the Vessels thereof.

The stretching pain in the bottom of the womb, comes chiefly from outward Cold taken in after Childbearing, while the inward Orifice of the womb is large and open, for want of keeping warm, by which means the Air gets in, and fills and stretcheth and weakneth it, and by cooling causeth pain

The stretching of the bottom of the womb, causeth the pain after Childbearing.

pain. This is called the pain after Child-bearing. At another time this pain cannot come from taking in of Air, becauſe before Conception, the womb is ſmal and thick, and the cavity which is to be filled with Seed in time of Conception is very ſtraight, and after conception alſo, when it grows bigger with the Child, the inward Orifice is cloſe ſhut, and the womb full. Nor from wind bred in the Body, becauſe if it get into the ſtraight cavity of the womb or breed there, it cannot ſo ſtretch the womb to cauſe pain, becauſe it is very thick. Neither can water cauſe pain for the ſame reaſons. Though ſome ſuppoſe that the womb may be like a bladder inlarged, and have an Inflammation from wind and water, as they call it. For though the womb be larger in ſome women by Nature, or by much moiſture which looſneth it, yet it cannot be ſo filled and ſtretched that pain may follow. And if the repletion be great, there will be rather a weight and heavineſs then a pain, as it is when the Child is great, but the weight of the Child by ſtretching the Ligaments may cauſe a kind of pain, but it is in the Groins, and not in the Loins as we ſhewed. So then there is no other ſtretching pain of the womb but what is after Child-bearing, cauſed either from the ſubſtance of it, or from the Membranes and Veſſels, by which it hangeth, but from Humors retained, and then it may reach to the ſides (as we ſhewed in Hypochondriack pains) as when the courſes are ſtopped, or diſordered or foul. This foulneſs comes from foul blood and humors in women of evil habit that want their Courſes; which do ſo fill, ſtretch or prick the part they that cauſe pain, eſpecially when they are hot, and ſend up Vapors, and produce other Accidents, eſpecially the ſuffocation of the womb, as we there ſhewed.

The ſtretching of the veſſels is the uſual cauſe of pain in the womb.

Inflammation of the bottom of the womb, cauſeth the burning pain thereof.

The Inflammation of the bottom of the womb and neck alſo, cauſeth pain with divers accidents, as we ſhewed: This as that of the Bladder may leave an Impoſthume, Ulcer, Scirrhus or Gangræn. And the cauſe external may be a Stroak or Bruiſe, or internal, abundance of blood about the womb, upon ſtoppage of the Terms, when they flow not into the neck, but into the ſubſtance of the womb, and cauſe Inflammation according to the diverſity of the blood. And if the quality thereof be malignant it may cauſe a Cancer, which ſhall be mentioned in Diſeaſes of the Neck of the Womb, becauſe it is commonly in that part. The womb is chiefly inflamed from difficulty of Deliverance, great pain and ſtraining, either while the child or after birth remain, or after they are gone, which cauſeth a Feaver. And this Inflammation is rather the cauſe of many womens death, then the retention of the after-burden, and the pain they have, comes from the Inflammation as well as from the Air that gets into it, and is then greater and more dangerous.

The Cancer of the womb.

The Inflammation of the womb after Child-bearing cauſeth the ſecond ſort of pain after child-bearing.

The Cure.

The Cure is different according to the part affected, and the variety of Cauſes, as the Bowels are ſtretched, cooled or inflamed by Blood or Choler. And is to be applied to the ſtretching or Inflammation of the bladder or womb.

The cure of the Colick & pain of the womb & Convolvulus, from ſtretching or cold.

The ſtretching oft he Bowels from what cauſe ſoever, if it cauſe the Cœliack and Iliack pain, muſt be cured the ſame way, as alſo when it comes of Cold. And if it come from the abundance of excrements and wind, with pain and rumbling; if they come forth as they uſe to do, by Faſting, Belching or a Flux, you muſt take the ſame courſe as in Diarthæa.

If theſe Excrements cauſe a ſtoppage in the thick Guts, and ſo by ſtretching the Colick, it is eaſier cured then in the ſmall Guts, eſpecially when they are evil, and increaſe continually, for then Iliack paſſion which is ſo deadly, and hard to be cured, will return and cauſe Convulſions and Palſies, and the like, which though the pain ceaſe, deſtroy the Patient. And if the ſtoppage be ſo hard that it cannot be opened, but the thin Guts are ſo full of Excrements, that they are ſent back into the Duodenum, then follows the deadly convolvulus, or Spewing up of Excrements, or Iliack, or knots or tanglings of the Guts.

In all which caſes (except when the Guts are knotted, or an Iliack pain from a Rupture, for then you muſt rather look to the putting up the Gut, then to the Iliack Paſſion) the cure is by loſning the Excrements, cleanſing and bringing them forth, by looſning and expelling wind out of the belly, and by abating of the pain. And if Humors be cholerick, ſharp or evil, they muſt be purged and allayed, not with cold and ſharp, but with temperate Medicines: And the pain chiefly reſpected, with Narcoticks to prevent convulſions, and the like. If the pain come from glaſſie Flegm that cools the Guts, it muſt be purged and cut, and the cooled parts warmed; which will cure a ſimple Diſtemper. Theſe things are done by the following means.

Clyſters are the beſt in this caſe, becauſe they go ſtraight to the Guts, for if the cauſe be in the thick guts, they go to them; and if in the thin, their vertue reacheth thither by continuation and vicinity. They are made of Emollients to ſupple the hard Excrements, which cauſe pain by binding and holding in of the wind, and purgers that cleanſe ſtrongly, when there is great ſtoppage by glaſſie Flegm in the Guts; alſo of warm things that expel wind, and comfort the Guts. And when there is great pain, they are made of Anodynes, and at length of Narcoticks. The quantity of theſe Clyſters muſt be from a pint to a pint and half, beginning with leſs at the firſt, while the Guts are ſmall, and ſo enlarging by degrees the Examples, whereof are theſe.

An emollient Clyſter of a pint of Sallet-oyl and a little Butter or Greaſe, may preſently be made.

Or this which provoketh a little. Take *fat Broath of Tripes, or the like*, and boyl therein *Caraway ſeede, Bay or Juniper-berries a pugil, Butter or Oyl three ounces, Honey two ounces*, with a little *Salt* make a Clyſter.

Or thus; Take *Mallows, Marſh-mallow roots and all, Spinage, Arach and Brank-urſine, each a handful; Lilly-roots two ounces, Chamomil and Melilot flowers, each a pugil*; boyl them in *fat Broath*, add *Butter or Oyl three ounces, Hogs greaſe an ounce, Honey two ounces, and a little Salt.*

A ſtronger to expel wind alſo. Take *Mallows, red Coleworts, Mercury, Beets, Pellitory, each two handfuls; Penny-royal or Organ a handful and half, Beet roots two ounces, Liquoriſh an ounce, Chamomil and Elder flowers, each a pugil; Bran a pugil, Fenugreek and Linſeed, each an ounce; Caraway ſeeds half an ounce, Cummin ſeeds two drams, Figs ten*; boyl them in *Wine and Water*, ſtrain and add

Honey

Honey and brown Sugar, each an ounce; juyce of Mercury or Beets an ounce and half, Oyl of Nuts three ounces, Turpentine dissolved with the Yolk of an Eg half an ounce, with *a little Salt* make a Clyster.

It is stronger in *Cock broath, with Senna and Carthamus seeds, each six drams; Polypody two ounces, or Mechoacan, or Briony, or Sowbread roots six drams, with Cumminseed two drams, an ounce of Hiera picra, or Diacatholicon, or Benedicta, or Diaphœnicon, Indum majus, Elescoph half an ounce, or an ounce of the juyce of Sowbread.*

When the Obstruction or Binding is great, or when the Flegm is glassie and tough, stronger may be used, but not otherwise, least they increase pain; as *three drams of Turbith or Agarick*, and sometimes *half a dram of Coloquintida* in a clout, warily, least it burn the Guts, *or three drams of Hiera Colocynthidos, Logadij, Rufi Hermetis.*

The best cleansing Clysters against Flegm, are made of Turpentine two ounces, with the Yolk of an Egg, Honey and Wine, or Oyl alone.

Or thus against wind: Take *Boys urin six ounces, juyce of Pellitory four ounces, thick boyled Wine three ounces, Oyl of Rue two ounces,* with *two Yolks of Eggs and a little Salt,* make a Clyster.

Some make Clysters of Spaw-waters to cleanse.

Strong Wine healeth, expels wind and pain, as Hippocras and Claret a pint. If you fear the Heat, you may allay it. And if you will make it hotter, add two ounces of the Spirit of Wine.

Or thus to cleanse and abate pain. Take *three quarters of a pint of the best Wine, Oyl of Chamomil, Dill or Butter four ounces, Honey two ounces.* This Clyster will set any purging Medicine a working; as we shewed in *Cardialgia.*

Or give true Hydromel, with Wine boyled and Sugar, or Mead, which will heat less, and cleanse more.

Or make a Clyster of Onion broath, and Oyl.

Or this hot Clyster to expel wind. Take *Lilly and Marsh-mallow roots, each two ounces; Elicampane half an ounce, Bettony, Southernwood, Wormwood, Calaminta, Horehound, Rue, Organ, Penny-royal, Balm and Hedg-mustard three handfuls, Chamomil, Melilot, Rosemary, Lavender, Stœchas flowers, each two drams, Fœnugreek and Linseed, each an ounce;* boyl them in *Wine and Water,* add *Honey of Rosemary two ounces, Oyl of Lillies and Sallet-oyl, each an ounce an half; Hiera picra and Electuary of Bay-berries, each three drams;* with *Salt* make a Clyster.

In glassie Flegm it will heat more, if you add *Roots of Pellitory, Calamus or Orris six drams, Centaury flowers a pugil, Gith seeds two drams, and an ounce of Honey of Squills, with two ounces of Wine, and a dram of Castor* which is very comfortable to the Guts, *or half a dram of Euphorbium, or Galbanum, or Opopanax,* but *Musk, Ambergreise or Civet,* will not change the stink of the Excrements, and therefore are superfluous.

A special Clyster against wind. Take *Organ, Rue, each a handful; tops of Rosemary, Stœchas, Lavender, each a pugil; Chamomil flowers two pugils, Bay and Juniper-berries, each an ounce; Caraway and Cummin seed, each half an ounce; Fennel seed two drams, Ameos, Parsley, Seseli, Carot or Rue seed, each a dram;* boyl them in *wine and water,* add *three drams of the Electuary of bay-berries, Hiera picra two drams, Honey of Rosemary an ounce, Oyl of Dill and Nuts, each an ounce and half; with Salt,* make a Clyster.

A pint of Oyl of Rue, with two ounces of Sack is good.

An Anodyne mollifying Clyster: Take *roots of Lillies and Marsh-mallows, each two ounces; Mallow, Bettony, each a handful; Chamomil and Melilot flowers, each a pugil; Fœnugreek and Linseed, each an ounce; Crums of Bread four ounces, Caraway seed two drams, Aniseed a dram,* boyl them in *Tripe broath or Milk,* add *Butter two ounces, Oyl of Dill an ounce and half, Goose grease an ounce,* with *two Yolks of Eggs* make a Clyster. Some say that Wolfes dung is good in Clysters *six drams.*

Or Oyl of Olives, Walnuts, Acorns, Almonds, Linseed, Jesamnie, or of Chamomil or Dill, are good Anodynes in a good quantity, with the Mucilage of Fœnugreek and Linseed two ounces, two Eggs, and half a dram of Saffron.

To cleanse and abate pain: Take *Honey, Sugar, boyled Wine two or three ounces* with *Oyl.*

Or thus: Take *Oyl of Chamomil, or Dill and Barley-cream, each half a pint; Sugar or Honey, or boyled Wine two ounces.*

Narcoticks are given safest by Clysters; as *Henbane or Mandrake leaves, or two drams of Philonium Romanum, or Requies* Galeni, *or Treacle and Mithridate, each half an ounce.* And as you give Narcoticks at the mouth with Purgers, so you may add Philonium here to benedicta, and other purging Electuaries.

Six grains of Opium dissolved in Wine or Aqua vitæ, is excellent in a Clyster to take away pain.

Or *half a scruple of Opium, half a dram of Castor, and a pint of Oyl of Rue or Dill.*

Suppositories are good to provoke, alter and abate pain. Some give them to expel wind, which they can hardly do.

The common are of Honey and Salt, adding Hiera, Mouse-dung, Coloquintida.

They say that a Snakes skin rub'd upon a brass Bason and burnt, is good to be put into the Fundament against the colick.

And to anoynt inwardly, with Juyce of Lettice and Opium; or with *an ounce of Oyl of Dill, a scruple and half Castor, and a scruple of Opium,* put in with wool, or any Suppository of *Opium.*

Purgers are useful, when Clysters are refused to remove the cause, and open the Belly, when the cause is high, but beware of strong, which will increase pain; they are good afore clysters, to draw the Matter down, as I do in colicks.

Purging Wines are best for the Guts, when clysters are refused, for they fetch the Excrements out of secret places, better then clysters. And I had rather use them for the Wines sake, that correcteth the Purgers, that they offend not the Stomach and Guts: we give Examples of them in the pain of the Heart.

This is best for the Guts: Take *Grass roots and Fennel roots, each six drams; Roots of Calamus, Elicampane, Masterwort, each half an ounce; dryed Citron peels and wormwood, each three drams; Marjoram, Calaminta, Penny-royal, Groundpine, Rosemary flowers, red Roses, Chamomil flowers, each two drams; Bay-berries three drams, Caraway and Smallage seed, each two drams; Fennel seed three drams, Senna two ounces, Agarick half an ounce, Turbith two drams* (these are corrected by the wine) bruise and slice them for *four pints of wine or more,* give a Draught when the Belly is bound, of the Infusion or gentle Decoction thereof.

This wine is good against Choler or sharp Humors. Take *Succory roots an ounce, wormwood half an ounce, Violets and bugloss flowers, each a pugil; Aniseeds and Violet-seeds, each two drams; Polypody an ounce and half, Senna an ounce, Rhubarb two drams, Spike half a dram:* Use it as the former.

Or make a Decoction or Syrup of the same.

The Broath of an old Cock with coleworts loosneth the Belly, with a little caraway or Fennel seed against the wind.

Or thus: Take *an old Cock* after fighting, unbowel and ſtuff him with *Mints, Marjoram, Time, Savory, each two handfuls; Chamomil and Roſemary flowers a pugil, Annis, Fennel and Caraway ſeeds, each half an ounce; Galangal or Calamus three drams, Polypody, Mock-ſaffron, Senna, each an ounce; Tartar half an ounce, with Sal Gem or common Salt,* boyl them in water to Halfes, as I ſhewed in Aſthma, drink a good draught.

Or give *Turpentine half an ounce,* as in the ſtone, with *Hiera Benedicta,* or the like.

Or Caſſia with Annis, Fennel or Caraway ſeeds, to looſen.

Alſo theſe Electuaries, Catholicon, Diaphænicon, Indum, Majus, Eleſcoph, Hiera picra, or of eight or of fifteen things, Benedicta or the like, with a Decoction of hot plants, with ſpiced wine.

Or gentle Pills of Hiera, of eight things, of Spices with half a ſcruple of Caſtor or ſtronger, if the binding be great, bewaring of coloquintida or Agarick or Turbith for they twitch the Guts, when given in ſubſtance.

Two ſcruples or three of Tartar cleanſeth flegm, or cream of Tartar often waſhed and dryed again, as I uſe it, in the purging Decoctions of Senna, Bryony roots, black Hellebor, or the like.

Or that purging Pouder for the ſtone.

A Plaſter of Sea ſponge, ſeeds hulled and beaten with Wax, and laid to the Belly looſneth it.

To prevent: the Humors muſt be prepared before purging and to cure alſo.

They muſt be ſuch as cut flegm, when it is cold and tough, as that with Glaſſes, as we ſhewed in Heart-ach, by Syrups, Waters, Decoctions.

Somtimes a Vomit prevents the Colick, and is good at the firſt, and in the Iliake, Choler-Vomiting, muſt not be ſtopp'd.

Oyl of Palma Chriſti drunk, doth the ſame and takes away pain.

Let the Dyet be thin and ſparing in the fit and before, bewaring of crude, windy, hard or binding meat, and in the fit when the cauſe is cold, give hot cutting and diſcuſſing Spices; and ſtrong wine without water or at leaſt Spiced water with Cinnamon and Pepper, as in Cardialgia and weakneſs of Stomach. Theſe hot Spices are not good, when there is Cholerick Excrements. And wine muſt be given moderately, becauſe it hurts the Nerves, and a Convulſion is feared; nor may ſower things be allowed, though they temper choler, becauſe they cauſe pain. If the Excrements are ſtill hard, give moiſt fat Meats and Oyls and Butter.

When you fear the *Convolvulus,* give brown bread boyled and the water caſt off, and made into a Pudding with Hogs greaſe or Butter.

Or a Lark roaſted and eaten with Cock broath. Or the broath of an old Cock or of Snails.

Or Decoctions of Calamus graſs, Elder, Calamints, Rue, Chamomil, Dill, Melilot or Rocket flowers, in Water or Cock broath, with Wine, Honey or Sugar. Some commend the Decoction of Southernwood, others Pellitory in Wine with ſugar or Wormwood with Cummin ſeeds or Horſe-radiſh, Wine and Sugar, and Seeds and Spices, as Calamus, Galangal, Nutmeg, Cloves infuſed or boyled gently in Wine with a little Saffron and Sugar, or thoſe for a weak Stomach mentioned.

Alſo the juyce of Sulphurwort with an Egg.

Or blood of an Eele.

Or water wherein a Dears Pizle was waſhed.

Or four ounces of diſtil'd water of Herb Trinity, Dogs tongue, Elder or Broom flowers or flowers of Chamomil, Bean ſhales, or of Tizil, or of Cow dung, or a ſpoonful or two of Cinnamon water.

A Compound water: Take *Ginger half a pound, Cinnamon, Cloves, Nutmeg, Zedoary, Galangal, each two ounces; Maſtick half an ounce,* bruiſe and infuſe them in *Wine,* diſtil them and give two or three ſpoonfuls againſt wind, add *two drams of Mints, Fennel and Annſeed, each half an ounce.*

The Compound Aqua vitæ mentioned in Heart-ach, from a cold cauſe, is good.

Oyls do good alſo by ſlipperyneſs and mollifying the Excrements, as Sallet Oyl well waſhed, if it be old and rancid ſix ounces to aſſwage pain, or Oyl of ſweet Almonds, Nuts or Lineſeed taken alone in a good quantity, or with broath, to which Oyls you may add *Sugar and Sack the third part, or two drams of Aqua vitæ,* or other diſtilled waters.

An excellent Remedy: Take *Oyl of ſweet Almonds, or Sallet Oyl* for Poor people *four ounces, of the beſt Sack an ounce and an half, ſyrup of Poppy half an ounce.*

Oyl of bitter Almonds, and of Peach kernels are good againſt the Colick and Iliake, as well againſt the Stone to be drunk, alſo Oyl of Bayes, with ſome drops of the Chymical Oyls of Cinnamon, Cloves or Mace.

Some commend the Oyl of Turpentine or Vitriol, above the reſt.

And ſix drops of the Sky colour'd Oyl of chamomil flowers newly drawn, which is better, when made of Roman chamomil.

There are alſo good pouders mentioned in cardialgia from a cold cauſe, or from wind, or weakneſs of the Stomach, which are good in this Diſeaſe.

Dioſcorides and others uſe a dram of theſe following in Pouder with wine, broath or otherwiſe, as of calamus, Orris, Maſterwort, Sallowwort, Squils, with Dittany, Birthwort, Eryngus, Piony, wild parſley, Roſmary roots, wild Mints, garden Mints, wild Bettony, Groundpine, herb trenity, wild Laurel, Sea purſlane, Spiderwort, cudweed, Wintercreſſes, Fleabane, Roſemary, pennyroyal, Laurel; alſo of the flowers of petty Mulline, alſo pouder of the ſeeds of Ameos, parſley, caraway, cummin, carrots, Annis, Fennel, Seſeli, Lovage, Fennel-Gyant, Baſil, water Mints, coleworts, Momordica, Almonds, peach kernels, Bay and Juniper berries and the pouders of all Spices and Saffron.

Alſo pouder of Orange peels, black Ivy ſeed and ripe Roſe ſeeds and Sagapenum, or Wax given in broath, which is the experiment of *Dioſcorides* and others. Alſo pouder of Amber and Jet.

Alſo the ſtomach of a hedg-Hog or Hens Gizard, or Cocks for men, the inward Skin, Wolfs guts, Harts Pizle, Colt ſtones, and young Harts-horn, bones of Hogs feet burnt, white Hen dung, white Dogs dung, or Wolfs dung in pouder, with a little Cinnamon or Angelica root for the ſcent.

There are alſo Compound Pouders, beſides thoſe in Cardialgia or Heart-ach, made of the things mentioned, with a little Pepper, Cummin ſeed. and Myrrh.

Alſo the Roots and Herbs mentioned are good in Conſerves and Candies.

Alſo Horſe radiſh candyed and given with Mulberry leaves, and the ſtones of Medlars.

Or two drams of the Electuary of Bayberries againſt wind, its made of Rue, Mints, Organ, Bayberries, Ameos, Cumen, Lovage, Caraway, Carot ſeeds, bitter Almonds, Pepper long and black, Caſtor, Sagapenum, Opoponax and Honey.

But the Castor and Rue, make that unpleasant, therefore give this: Take *Bayberries an ounce, Mints, Marjoram, Rosmary tops, each two drams; Rue, Organ, each a dram and an half; Fennel, Caraway, Ameos, Lovage seed, each a dram; Cummin seed half a dram, Pepper and Ginger, each a scruple; Sagapenum* dissolved in *Wine a dram, Castor half a dram, with a pound of Honey or Sugar,* make an Electuary.

Also *Diacuminum, Dianisum, Diagalanga, Diacalaminthes, Diatrionpiperem,* and the rest mentioned in Heart-ach, are good here in Electuaries or Lozenges.

In great pain of the Guts, we give Narcoticks, that presently give ease, when all things else fail, and we repeate them as the pain returns. These ingeniously used do no hurt but good, by abating pain, causing sleep, and preserving strength, by which the Physitian is credited, moreover by provoking sweat (as I shewed) they take away much of the cause of the Disease.

Also we give Antidotes called Opiates for the same, which do good in two respects, when the Humor is evil and venemous, as Treacle and Mithridate and Triphera Magna, and the like; the quantity of two drams, that the Opium may work: or we give a dram with a grain or two of Opium.

The Antidote of *Philo* the Physitian of *Tarsus* mentioned by *Galen*, is the best, made of Opium, Henbane-seeds, with hot things, and correcters of Opium, as Castor (instead whereof *Galen* useth Euphorbium) also with Musk, Pepper, Pellitory root, Spike, Saffron and Honey. To this composition, some add other hot things, to expel Wind and leave out the Musk; as Wood-cassia, Cinnamon, Zedoary, Costus, Doronicum, Smallage, Fennel, Carot and Alisander seed; this is called the great *Roman Philonium*. The *Arabians* as *Hamech* and *Rhasis*, add other things to expel wind, as Rue, Mints, Bay-berries, Ameos seed, Gith and cummin seed, and Mandraks. We use this Anodine of *Philo* when there is great pain to be allayed, but *Philonium Romanum*, or of *Rhasis* when there is need of more heat to discuss wind; we give from two scruples to a dram, as we have the strength thereof by Experience. There is another Antidote to allay pain, called *Requies*. These work better with wine taken with them, or presently after them, which is Narcotick (as I shewed) and we mix them with other Cordials.

Many other Narcoticks are made with Opium, some are unpleasant with castor. The chymists commend their Laudanum: In making of which new, (because opium hurts not by cold, as some without reason suppose, but by a hidden quality, and by the great quantity by which the Brain and Nerves are stupefied) you must see that it be diligently mixed through the whole body of the Medicine, that one dose have not more Opium in it then another. And make tryal at first with a small dose. In this you must be more accurate then in the correction, by hot things (except the stomach be cold or windy) for if Opium stupefie by cold, those things will hinder its operation. Therefore, if leaving out those hot things, you only add to Opium those that correct its evil scent and bitter rast, and so give it in a small quantity, it is safe, as I have often experienced with good succes. How this may be done, I shall give you some presidents.

Narcotick Pills instead of Philonium: Take *Opium a scruple, white Henbane seeds two scruples, Pepper two drams, Castor half a dram, Saffron a scruple,* dissolve the *Opium in Sack*, and make a Mass; dry it, and then pouder it, and make a Mass of it, with *Syrup of Poppies*. First give *half a scruple*, and try it, then advance if you think fit, or decline in quantity.

An opiate Electuary for the Heart and Stomach also. Take *species Diambræ, or Diamoschi, or Aromatici moschati two drams, Cinnamon a dram and half, red Sanders half a dram, Sugar four ounces, Opium dissolved in Wine two drams, Oyl of Cloves, or of Cinnamon some drops,* with *Syrup of Quinces or Citrons* make an Electuary: Give *half a dram* at first to try it.

You may make Troches of the same with Gum traganth, and give the same quantity.

Or thus more pleasant: Take *Opium two drams,* infuse it in *three ounces of Wine*, after it is dissolved and often stirred, and settled again, pour off the clear Liquor, and filter it, then add *Sugar two ounces, Cinnamon two drams, Musk half a scruple,* with *Gum Traganth* make *Troches*: Give *half a scruple* for a tryal.

Many other Narcoticks are good here also, as Syrup of Poppies, only we here speak of such as properly help the Guts.

We often mix Narcoticks with purging Medicines in this Disease, as in the Stone and Heart-ach, to loosen the Belly, and take away pain also, because one doth not hinder the operation of the other; as I have often experienced. Nor doth Treacle, (though *Galen* think otherwise) stop the purging of Medicines. Therefore *Rhasis* when he desired to purge and take away pain together, mixed Diagredium with his Philonium.

Dioscorides bids the Belly be washed with Sea-water in fits of the Colick; or with any salt water.

Or apply Aqua vitæ with a clout to the Belly.

Or Oyl of chamomil, Dill or Nard, with a Felt.

Or sit in Oyl, or Oyl and Milk.

Or thus: Take *warm Oyl and Butter half a pound, Turpentine dissolved with two Yolks of Eggs two ounces, Saffron a dram,* with *Stupes or Clouts*, apply it to the Belly.

Or in a Decoction of Anodynes and Expellers of wind, as we shewed in the Stone. As of Mallows, Marsh-mallows, Penny-royal, Organ, Calamints, Mints, Wormwood, Southernwood, Rue, Sage, Bayes, Chamomil, Melilot flowers, Dill, Elder, Rosemary, Stœchas, Lavender flowers, Fœnugreek, Linseed, caraway, cummin, Fennel seed, Bay and Juniper-berries, more or less; with Orris root, citron peels, Mugwort and Rue seed, Gith, Seseli, Smallage, with cloves, Schænanth, Spike, with Sulphur vivum and Salt-peter. Boyl all in water and wine, with a little Vinegar to make it pierce, or Oyl to allay pain. Somtimes boyl it in water and oyl, or in Bath or Spaw-waters, if you have them.

Anoynt with Anodyne, hot Oyls, as of Olives, Nuts, Almonds, Bayes, chamomil, Dill, Rue, Spike, Lillies, Wall flowers, Elicampane; or with Oyl of Lillies of the Vallies, which is chiefly provided against pains in children, adding somtimes these hotter, as oyl of castor, Euphorbium, Pepper, Petroleum, Spike.

Or anoynt with the Grease of Mountain or Field Mice.

Or thus; Take *Oyl of Chamomil and Rue, each an ounce; Oyl of Spike half a dram, Galbanum dissolved in Aqua vitæ six drams*: make an Oyntment.

Or thus: Take *Oyl of Chamomil and Dill, each an ounce and half; Narde-oyl and of Rue, each an ounce; Oyl of Spike half a dram, Sack or juyce of Mints two ounces, Hens grease and Butter, each an ounce; Pouder of Galangal two drams, Cloves, Nutmeg, each a dram; Spike, Gith seed, each half a dram;* with *wax* make an *Oyntment*. You may add other Spices, also Turpentine and Mastich, or apply Species to the stomach, as Diagalanga.

Or

Or, Take *Oyl of Nutmeg or Mace by expreſſion*, and mix it with *Oyl of Cloves*, or the like. Or for the rich with *Civet*, *Muſk*, *Ambergreaſe*, *or the Algalea of* Hollerius *diſſolved in Oyl de Been, or of ſweet Almonds.*

Or the Oyntment of Agrippa or Dialthæa.

Alſo the cawle of a Kid or Lamb or Calf or Heifer, broyled till it melt, and applied to the Belly hot; this is excellent for children: It is better fryed with Oyl of Rue, or the like, and ſprinkled with cummin ſeed or cloves.

Some apply Leaven to the Belly.

Or Goats or Ox dung ſprinked with wine, cummin, Bay-berries, and a little Honey.

Or an Emplaſter of Soap, Butter, or Oyl and Salt.

Or the Plaſter of Bay-berries made of Frankincenſe, Maſtich, Myrrh, Bay berries, cypreſs berries, coſtus and Honey.

Or Wheat flower, or Barley, or Orobus, Fœnugreek or Linſeed, with Greaſe, Butter, or Oyl and Honey.

Or Pellitory, Celandine, the great Mints, Rue bruiſed with Honey and Wine, or boyled; and oyl and meal added for a Pultis, with Cummin ſeed.

Or Juyce of Henbane or Tobacco mixed with meals mentioned, or the Herb bruiſed or fryed.

Or burnt Nuts ſhells, and all added to the former.

Or apply bags hot and dry, or wet with wine or Aqua vitæ. made of Milium parched, Bran and Salt, with Caraway ſeeds, Chamomil flowers, Bay leaves or barberries.

If from the great pain you fear Inflammation, open a Vein in full bodies, otherwiſe it is not good in this caſe, becauſe nothing can be taken out of the Meſeraiks thereby.

A great Cupping-glaſs that will compaſs the Navel, is good againſt wind, if applied with Heat to the belly, eſpecially if it be firſt laid in hot wine, or anoynted with juyce of Garlick.

And in other caſes, it is good to apply it a little below the pained part.

Wind alſo may be drawn out by a clyſter ſyringe, and a clyſter ſet on work by drawing it.

The Amulets are a Girdle to the naked belly, made of the guts of a wolf, or skin of a wolf girt with the hair next to the belly; or a Navel-ſtringe dryed and kept for this purpoſe.

Or apply a young wolves skin, or the dung of a wolf.

Or a Nut-ſhell fill'd with Quick-ſilver, and hang'd about the Neck to the belly, is good to prevent, or which is thought rare, the little bone of the outmoſt joynt of the right wing of an old Crow, killed in the time of his kawing.

Or Wolfes dung in a Nut-ſhell, and they ſay it is better when the ſtring that it is tyed about the Neck which is made of buff, or a thread of ſheeps wool, but this ſheep muſt be firſt kill'd by a wolf forſooth. There are many more which we wilfully omit.

The Cure of the Colick, or Iliack from Inflamation, Burning or Eryſipelas.

If the Iliack or Colick come from Inflammation, Heat or Eryſipelas of the Guts, or be in the ſmall guts from blood, ſo that the Excrements are vomited up. It is deadly in old men, and in the thick Guts it is dangerous, when the Urin is ſtopt.

If the ſubſtance of the Guts be hot from choler or Eryſipelas, the Iliack is dangerous, and cauſeth convulſions ſooner, and worſe then when the choler is in the cavities of the Guts obſtructed. In theſe caſes when blood or choler is carried to the ſubſtance of the Guts, proceed thus.

Let blood in the Inflammation, eſpecially if there be a Feaver in the Arm, but if the Inflammation be below and the Urin ſtopped, bleed in the Foot. And in an Eryſipelas when the pain is great, a little bleeding can do no hurt.

A cooling Clyſter alſo is to be given in great Inflamations. As, Take *Marſh-mallow roots two ounces, Violets, Mallows, each a handful; Flowers of Chamomil half a pugil, water-lillies a pugil, Roſes a pugil, Linſeed and Fleabane ſeed, each two drams; cold Seeds half an ounce. Aniſeed two drams*, add *Cream and Butter an ounce and half, Goats greaſe an ounce, Oyl of Roſes at firſt, or Violets after, two ounces Oyl of ſweet Almonds* againſt the pain *an ounce, Honey of Roſes an ounce and half, Manna or Caſſia an ounce.* Some boyl *four Apples* therein, and in the Declination, they add *Oyl of Chamomil, Dill, Lillies.*

In choler thus: Take *of the Emollients, each a handful; Barley and Bran, each a pugil; Figs and Prunes, each ten; Chamomil and Melilot flowers, each a pugil, Linſeed and Fœnugreek ſeed, each half an ounce; Fleabane and Quince ſeeds, each two drams; Mallow ſeeds a dram*, boyl and add *Gooſe or Hens greaſe an ounce, Butter or Oyl an ounce and half, Oyl of Water-lillies and Violets, each an ounce; of Lillies half an ounce, Honey or Sugar of Violets an ounce and half*: make a Clyſter.

If you will have it purge, add *Polypody an ounce and half, or Senna half an ounce, the Electuary of the juyce of Roſes half an ounce, or Diacatholicon an ounce.*

In both caſes, uſe Aſtringents, as Plantane, Sumach, Roſes, when you fear an Ulcer which follows an Inflammation or Eryſipelas, the cure of this ulcer is mentioned in Dyſentery.

A Clyſter of the Broath of an old cock, with the emollient Herbs is good.

And of new Milk with Sugar, with the white of an Eg, and Mucilage of Fleabane an ounce.

Or of Milk, or an Emulſion of Almonds, or Barley-cream, with ſweet Butter, Sugar and Honey.

Or of Anodynes when the pain is great, ſuch as were mentioned, being temperately hot.

Give only gentle Looſners, if Clyſters may not be given; as Syrup of Violets, Roſes, the Decoction of Fruits, Raiſons, Prunes, Sebeſtens, Violets, with Rhubarb or Caſſia; and other Looſners not too hot.

Let the Diet be ſuch as in Inflammations internal, and in cholerick Diſeaſes, and give no Wine, for fear of a convulſion.

Let it be of things that properly help the Guts, which are not too hot; and Anodyne, and alſo Narcotick at laſt, mixed with Purgers.

In both caſes anoynt with Oyl of Violets, ſweet Almonds, chamomil, Dill, with Butter and Mucilage of Seeds of Fœnugreek and Line, Quinces, and with Fats.

Alſo uſe a ſweet Bath and a Fomentation made of the clyſter and Ingredients.

And a cataplaſm of the reſidents of the clyſters, and of Barley-meal, Lime and Fœnugreek ſeed, with Butter, Fats and Oyls.

It is good in the Iliack, to apply cupping-glaſſes with Scarification, in an Inflammation to the Groins.

And Amulets mentioned.

The cure of the Iliack from Knots comming in the Guts.

If from tumbling or leaping, or a Fall upon the Belly the Guts be knotted, and the Excrements ſtopt, ſo that they begin to be vomited up, you muſt cut open the belly by way of Longitude, where the pain or tumor is, and ſo skilfully place the the Guts in order again. This is the laſt and only Remedy.

If

The cure of the ſtretching pain of the Bladder and urin: and of pains after birth.

If ſtretching of the Bladder and Womb cauſe pain, we ſpake of that in the Bladder in the ſtoppage of Urin, if the ſtone cauſe it: we ſpake thereof in painful Piſſing.

If the Womb be ſtretched by wind or cold external after birth, let the woman be kept very warm, and bound with a roulet below.

If it continue, uſe Medicines for the womb that are hot.

But if the pains of the womb come from evil humors about the Veſſels and Ligaments, ſuch as go before, or follow the ſtoppage of the Terms; or ſuch as is after, they ceaſe by reaſon of age and foulneſs: Then firſt purge away the filth, and make the courſes come, as we ſhewed. The remedies are the ſame for pains in the womb as for the Guts, when we deſire to heat and expel wind. Theſe hot remedies that expel wind and are anodyne, are mentioned in the Pains of the Guts, and are proper for pains in the womb, when they come after Birth, from cold Air, and continue long, or be joyned with other cold Diſtempers of the Womb. And becauſe that the Womb and Guts are refreſhed with hot things the things that provoke the Courſes are to be allowed. Hence it is, that becauſe they obſerved that hot remedies agreed with both the Womb and Guts, they ſuppoſed that theſe pains of the womb came from Cold, but they agree with the womb for other cauſes mentioned, and the rather, when thoſe remedies which heat the Guts, and diſcuſs wind, and aſſwage pain, are mixed with things proper for the Womb, otherwiſe the Womb-medicines differ little from thoſe of the Bowels; but uſe them as followeth, and they will better help the pain of the womb. Hence it is that they called the Pains of the Guts, the Pains of the Womb in both Sexes, Men and Women: And gave things that they obſerved good for the Guts, for the Womb. Theſe remedies being hot, and expellers of wind, and Anodynes, are chiefly good againſt pains of the Womb, when they come after Child-bearing, from cold Air, and are joyned with other Diſeaſes.

Bleeding will do little good, except in the Foot to provoke the Courſes, or for other Evacuations in another part.

The ſame Purges preſcribed for pains of the Guts, are good here. And becauſe Tubith doth trouble the Guts, and cauſe pain, it muſt be given for the Womb, from *a dram to four ſcruples in pouder*, with *a ſcruple of Ginger*, and *a little Cinnamon and Sugar, in Nutmeg-water.*

Alſo the Clyſters againſt Pains in the Guts are good here, whether emollient, pricking, heating or expellers of wind, becauſe they go to the ſtraight Gut, and there heat the Womb, which is joyned unto it, eſpecially if you add ſome Womb-herbs thereunto.

As thus: Take *Mugwort, Calamints, Penny-royal, each a handful; Chamomil and Melilot flowers, and Dill tops, each a pugil; Aniſeed ſix drams, Fænugreek and Linſeed half an ounce, Bran a pugil*, boyl and add *Honey of Roſemary an ounce, Oyl of Wall flowers three ounces, Benedicta laxativa and Hiera ſimplex, each half an ounce; red Sugar an ounce*, with *a little Salt* make a Clyſter.

Another; Take *Oyl of bitter Almonds ſix ounces, Gooſe greaſe two ounces, Turpentine diſſolved with two Yolks of Egs half an ounce*, give it in *Chicken broath.*

Mugwort-water is as good for the womb as the guts. And Oyl of bitter Almonds drunk in a good quantity. Some give Oyl of Scorpions. And the juyce of Horſe dung alone, or with Wine.

Decoctions to be drunk hot alone, or with Sugar, or Honey and Cinnamon.

The firſt: Take *Schœnanth two drams*, boyl it in *Mugwort-water*, give it hot at twice, or a *Decoction of Spike, or two drams of both*, for four times.

Another: Take *Motherwort half an ounce, Nutmeg two drams*, boyl them in *white Wine*: Give it at twice.

A third: Take *Juniper-berries two drams, Aniſe and Caraway ſeed, each a dram*; boyl it in *Wine*, give it.

A fourth: Take *Motherwort ſix drams, Roots of Devils bit half an ounce, Juniper-berries two drams, Aniſeed half an ounce, Caraway and Carot ſeed, each a dram; Nutmeg half an ounce, Schœnanth and Spike, each a dram*; boyl them in *Wine*, ſtrain it, ſweeten it, for three or four doſes.

The Infuſions mentioned for weak Stomachs, and others in Wine and Aqua vitæ, are here good.

And the things given in ſubſtance, as follow.

Mints, or great Balm called Greek Mints, is good in Broath or Drink, or Cakes, and Juniper-berries.

Alſo Pouder of the Roots of Maſterwort, Zedoary, Gentian *a dram*, or *a dram and half* with *Wine.*

Another Compound Pouder: Take *Roots of Motherwort half an ounce, of Maſterwort and Devils bit, each two drams; of white Dittany, Zedoary, Gentian, each a dram; Juniper-berries a dram and half, Aniſeed two drams, Carot, Ameos, Cummin ſeed, each a dram; Schœnanth two drams, Mace, Spike, each a dram; Ginger, Pepper, each half a dram, Saffron half a ſcruple*: make a Pouder, give *a dram in Wine*, or add *a double quantity of Sugar*, or make Lozenges, or an Electuary with *Honey.*

Diacyminum is good in pains of the Womb, and *Diamargaritum calidum*, when there is Weakneſs.

A pleaſant but good Pouder: Take *Cummin ſeed infuſed in Aqua vitæ and dryed a dram, Ameos and Ginger, each half a dram; Caſtor a ſcruple*, give *a dram with wine.*

Or a dram of the Jaws of a Trout poudered in Water of Chamomil, is excellent when the pain is before the Courſes.

Rondeletius ſaies that the Pouder of a dryed Secundine or After-birth, cureth the pains after Child-birth. And becauſe other Beaſts eat them, they have no ſuch pains; and he ſaith that he took it from his Bitch after ſhe had whelped, and ſhe preſently had pains.

Pills; Take *Opopanax, Sagapenum, each a dram; Caſtor, Gentian, each half a dram, Spike a ſcruple, Saffron half a ſcruple*, with *ſyrup of Mugwort* make Pills: Give *half a dram, or a dram.*

In great Pains, give Opiats as in the Colick, eſpecially *Triphera magna*, proper for the Womb, a dram and half with Wine, or Mugwort-water, with Mace a ſcruple, and Saffron half a ſcruple in pouder.

Or give Treacle, and a little Caſtor therewith.

Foment, make Baths for the Feet, proper for the Womb, with Decoctions of Herbs, Seeds and Spices; as chiefly for the Womb, Mugwort, Motherwort, Bayes, Balm, Nip, Coſtmary, Grapes, Savin, great Celandine, Swallow-wort roots, Wall-flowers, Miſleto of the Oak, Carot ſeed, and the like.

Or bags mentioned in Pain of the Guts.

Anovnt alſo with Oyls, as that of Bayes, Wall flowers, Orris, Lillies, Water-lillies, Nard, Elder.

Or uſe Oyntments, with Oyls and Juyces of Herbs and Gums, or Plaiſters, as that of Bay-berries.

Or Cataplaſms of the Plants mentioned, and Lillies and Onyons boyled, mixing Oyls: or that of Cow dung, and Cummin ſeed, with Honey and Wine, or with Henbane, if the pain be great.

Uſe alſo Injections made of Decoctions and Juyces of Plants, but they reach but to the neck of the womb, and therefore cannot take away pain, nor Peſſaries, except it be by provoking the Terms.

But Fumes or Smoaks go into the Womb, therefore they are better then Injections, if they be taken into the Body, from a Decoction.

Alſo ſweet things of Muſk and Ambergreaſe, put into the womb, refreſh it.

And rubbing of the Feet from the Thighs downwards: Cupping-glaſſes applied to the Hips cauſe diverſion.

The cure of the inflammation of the bladder and womb.

The Inflammations of the Womb and Bladder, if they cauſe pains in the lower part of the Belly, by reaſon of the joyning together of theſe parts are cured alike, as we ſhall here ſhew.

Inflammations are very dangerous in parts ſo exquiſitely ſenſible, eſpecially in the womb, when it is inflamed from hard travail, which cauſeth many Women to die in Child-bearing. Alſo if an Inflammation be in the Bladder from an Ulcer or Stone, it endangers the Patient. In both, if there be an Ulcer or Scirrhus cauſed by it, the caſe is, difficult, and if a Gangræne follow, death is at the door.

The cure of both Inflammations is as of others, by revelling or drawing by the matter when it firſt floweth to the part, by repelling or driving back, and by abating the Heat, and preſently (after the Flux is ceaſed) by conſuming and diſcuſſing it. And if theſe Inflammations produce other Diſeaſes, as is uſual in the Neck of the Bladder and Womb; they ſhall be ſpoken of in their places: But you muſt do as followeth againſt the Inflammations.

Firſt open a Vein in the Arm to revel, and then in the Foot to derive, in both caſes, except there be any hinderance, as a Flux in Women in Travail, in or after a miſchance.

Uſe Scarification and Cupping to the Thighs and Buttocks. But in the Inflammation of the Womb, if the Terms flow too much, ſcarifie and cup the parts above.

Give Clyſters to open the Belly, cool, and abate pain; and they are good at the firſt. For being given in at the ſtraight Gut, they communicate their vertue to to the womb and bladder, to which they are cloſely ſeated.

They muſt be ſuch Clyſters as are mentioned for the Inflammation of the Kidneys and Guts: And ſuch as abate pain, being made of Milk, to which when we wil cool to ſome purpoſe, we add Juyce of Nightſhade, Violets, Mallows, and the like.

Apply outwardly Remedies before and behind, firſt Coolers and Repellers, but not ſtrong Aſtringents, as in other Inflammations, leaſt Hardneſs follow: Afterwards in the increaſe, we add Diſſolvers, which we uſe at the concluſion alone: And if it tend to Suppuration, we uſe Ripeners.

A cooling and ſomwhat repelling Cataplaſm. Take *Roots of Marſh-mallows, two ounces, Plantane, Shepheards-purſe, Teazel, Vine leaves, and Violet leaves two handfuls*; boyl and ſtamp them, add *Meal of Barley and Lentils three ounces, Fleabane ſeed half an ounce, Oyl of Roſes two ounces*, make a Cataplaſm.

Or eight ounces of the Decoction diſtilled Water or Juyce of the ſaid Plants, with an ounce and half of Vinegar, is a good Epithem for the ſame: And it will be ſtronger with half an ounce of Bole, or Sanguis Draconis.

An Oyntment: Take *Oyl of Violets an ounce and half, Oyl of Roſes, or Myrtles, each an ounce*; add *two ounces of juyce of Nightſhade, or of the Plants mentioned, and an ounce of Vinegar*, and boyl them *in the Oyls*, or make them up with *Turpentine*. You may add *Bole* alſo to make it more aſtringent.

A Cataplaſm to be uſed in the increaſe of the diſeaſe. Take *Marſh-mallow roots three ounces, Lilly roots an ounce, Houſleek, Plantane, Nightſhade and Endive two handfuls, Chamomil, Melilot flowers, each a pugil; Figs and Dates, each ſix pair*; boyl and ſtamp them, add *Bean flower, and of Fœnugreek and Linſeed, each two ounces; Oyl of Roſes two ounces, Oyl of Lillies an ounce, Saffron a dram.*

The Cerot of *Galen* made of Houſleek, is good.

Or this Oyntment in the progreſs of the Diſeaſe. Take *Oyl of Chamomil an ounce and half, Oyl of Lillies and Roſemary and Linſeed, each half an ounce; juyce of Houſleek and Sowthiſtle, each an ounce; Mucilage of Fœnugreek an ounce and half, Conies greaſe an ounce, Saffron half a dram*, with *Wax* make an Oyntment.

You may uſe Fomentations alſo when there is pain, with the Decoction of Henbane, and other Herbs mentioned.

An anodyne Cataplaſm: Take *Crumbs of Bread half a pound*, boyl them in *Milk*, add *two or three Eggs beaten, Mucilage of Linſeed and Fleabane, each an ounce; Butter or Oyl of ſweet Almonds three ounces, Saffron half a dram.*

In the declination of the Diſeaſe, uſe digeſting Plaiſters, as of Melilot, Marſh-mallows, Diachylon, with Orris, and the like.

Or this: Take *Bdellium, Galbanum, Opopanax, each half an ounce; Storax two drams*, diſſolve them in *juyce of Motherwort and Chamomil*, with *a little Aqua vitæ, and* make a *Cataplaſm.*

A Bath in the Declination to take away the reſidue, is made of Mallows, Marſh-mallows, Lillies, Flowers of Chamomil, Melilot, Elder, Roſemary, Seeds of Line and Fœnugreek. And if the Womb be troubled, of Marjoram, Motherwort, Mugwort, Penny-royal, Wall-flowers, Agnus caſtus, Spike or Schænanth.

If it will not be digeſted, bring it to maturation with this cataplaſm. Take *Wheat flower four ounces, Meal of Barley and Linſeed, each two ounces; Figgs ſix pair*, boyl them in *Milk*, and bruiſe them, add *three Yolks of Eggs, and Hens greaſe two ounces.*

Or uſe Ripeners mentioned againſt other Diſeaſes.

Injections, becauſe they come not eaſily to the bladder in men, and cannot be without pain to both Sexes in the uſe of the catheter, cannot be in the time of Inflammation, but when the Urin is ſtopped, to open the paſſages of which we ſpake.

And becauſe the body of the womb, by reaſon of the ſtraight orifice, will not admit Injections; they are not profitable, except but by what they do outwardly to the neck or bottom of the womb, being inflamed.

And then uſe the Decoction of the Herbs mentioned for a cataplaſm, or the waters, or Juyces of them, to repel at firſt, and in the progreſs, uſe the Decoction of the cataplaſm, which we preſcribed to be uſed in the increaſe.

Or make a Peſſary for women, of the Herbs beaten up with Meal.

Pain chiefly requires Injections, as of Milk, and whites of Eggs beaten with Oyl of Henbane, or a little Opium, or of a Decoction of Poppy or Henbane ſeed, or Marſh-mallow ſeed, or the Juyce of it, or other narcoticks mentioned in Pain of the Belly.

Or Triphera Saracenica.

In the Declination make Injections, of things that take away the reſidue, and ſofnen to prevent Scirrhus, as of *Galbanum a dram and half*, diſſolved in *Oyl of Lillies, or Wall flowers an ounce, Storax a dram Marjoram water four ounces.*

Or: Take *the Decoction of wild Time four ounces*, and add *the aſhes of Mans bones, and two ounces of Balm-water*: make an Injection.

Or this Peſſary: Take *Galbanum, Storax, each a dram; Labdanum half an ounce, Coney, Gooſe or Ducks greaſe* enough, make a Paſte, and put it in a ſilk bag.

Alſo a Fume of Sagapenum, Storax, Benjamin, will conſume the reſidue.

Give Lenitives in both Inflammations, as Prunes caſſia, Syrup of Violets, Roſes, Whey; and no ſtronger till the Declination.

Give coolers in Diet, as cool Herbs and Water, and Syrups, Waters and conſerves that cool, mentioned in Feavers.

And things to provoke urin by a cleanſing moiſture, as Emulſions of the cold Seeds, Decoction of Peaſe or Whey.

CAHP. XIIII.

Of the Pain of the Privities.

The Kinds.

THe pain of the Privities is divers, in respect of the Sex (we have spoken of the outward pains in their place.)

The pain of the Yard. The pains inwardly in the Yard, being in the passage to the Bladder, which is for the Piss and Seed, and chiefly in the time of pissing, with discharge of Matter, with great straining, shall be spoken of in things sent forth. And the pain in the Godds or Inflammation, because it appears outwardly, shall be spoken of in the Externals, as if there be a pain and tumor from a Rupture in Ruptures.

The pain of the Privities in Women. The pains in the Privities of Women, are either where the two passages of the Bladder, and neck of the womb appear, or deeper, and are divers, either with Heat or Ulcer.

The Inflammation of the womb. This pain is either with Inflammation only, or with a Tumor, and that which is in the bottom of the womb is most usual, of which we spake in pains of the Belly. This Inflammation is apparent, and turns somtimes into an Imposthume, Scirrhus, or Gangræn.

The Cancer of the neck of the womb. There is another pain with heat and tumor, in the Cancer of the womb, more usual and apparent, then that in the Body of the womb. In which there is a tumor at the first as in other Causes, with a little pricking onely, and then increasing by degrees, it grows heavy and troublesom with burning; and at length it ulcerateth, and turns to a *Carcinoma*, and then there is a venemous Humor, and Blood flowing from thewomb, with other great accidents.

Condyloma in the Privities of women. The third Pain is called *Condyloma*, and is with heat and swelling, or excrescens within the womb: It is worse when there is an Inflammation. This is somtimes both in the Privities and Fundament, and in the Fundaments of Men, of which in its place.

The ulcerous pain of the Womb. A tearing or pricking pain is called the Ulcer of the womb, and it is either inwardly, or more outwardly, and may be touched, and increased by Medicines, or Copulation. And then blood, or thin matter comes forth: Or thick white concocted, not stinking, or it is crude, and waterish, or green, yellow, or black, and the same matter is sometimes pissed forth. And we have known it come forth of the Fundament, and Excrements come forth of the womb: and some have observed it is in the Bladder or Panch. What kind of Ulcer it is, whether Excoriation onely, or a profound deep Ulcer, whether creeping, or with swollen Lips, hard, or turned in; it may be seen or felt, or else if deep, seen by an Instrument. With this are divers other Symptoms. And if the Ulcer comes to the Orifice of the Bladder, there wil be burning, and often pissing. If it be malignant, the Vital Functions are weakned, or if joyned with other Diseases, as the French Pox, there are many Symptoms.

The Causes.

The pains in the Privities of Women, come from Diseases of the neck of the womb or Privities, and they are either Inflammation, or Cancer, or Condyloma, or Ulcer.

Inflammation is the cause of burning pain in the womb. Inflammation being chiefly in the neck of the womb, or in the womb, causeth pains with heat, burning or tumor, as it is greater or less, pure, or impure, or Erysipelas, where the heat is greater, and no tumor. The internal Cause of this Inflammation is Defluxion of Blood, to the menstruous veins in the substance of the womb: Or difficulty of travail may cause it, because the neck of the womb is very sensible, and the Orifice narrow. And somtimes there is an Inflammation of these parts from the Orifice, which is shut in Virgins with the *Hymen* or Membrane, when they are much pained at the loss of their Virginity, or at other times, when the woman is straight, and the man large. And it may come also from Pessaries, or corroding Medicines.

A Cancer in the hollow of the womb causeth pain, with burning, and pricking, and swelling, which somtimes turns to an Ulcer. And this is caused by a malignant Humor sent to the Neck of the Bladder. The kinds and causes of which shall be shewed in an external Cancer.

A Condyloma in the womb, causeth the pain above mentioned, and is in the Fundament: Also by reason of the same Causes to be mentioned.

An Ulcer in the womb is the cause of an ulcerous Pain. An Ulcer in the Cavity of the womb, or the Privities, causeth ulcerous pains, and other accidents that are more, as the pain is greater. For if it be a simple Excoriation with the skin off, there will the pain be small, by reason of the exquisite Sense of the part. If there be a great hurt or wound, the pain wil be greater, and the blood come. If a simple Ulcer, the pain will be less, but with a Flux of Matter, if it be foul, the Ulcers be eating called *Noma*, or when they are deeper *Phagadænica*, the pain is longer, because there wil be a Flux of Matter. If the Ulcer reach the Neck of the Bladder, there will be painful Pissing. If it eat through the womb and the strait Gut, there will be Matter by stool, and the Excrements that should have passed through the Fundament, come through the womb. Or if the Ulcer reach to the Neck of the Bladder, or the Abdomen, the matter will come forth there, and if it continue long, it eats away the neck of the bladder: As we have known in some Women, who have lost all the womb. And if the Ulcer be cancerous, there will be a *Carcinoma*, and more pain then in a Cancer not ulcerated, and the Lips wil be swollen, and turned in, and the matter wil flow, and somtimes blood, and that much at the time of the terms, in so much that some have been in danger of death thereby.

These Ulcers come from Hurts, as Inflammations, as in hard Travail, the first Copulation, or other that is violent, by which a Vein is broken, as when they loose their Maiden-heads, some bleed from the Terms, by rubbing of the Veins or the neck of the womb, or from hurt of the orifice, which causeth an Ulcer. Some think it comes from the breaking of the Membrane Hymen, and take it for a sign of Virginity, though it happen not alwayes to Virgins at the first Copulation, but to such only whose Veins are easily opened, being tender, and are nigh their Courses at the time of Marriage, and then no Ulcer follows. This may come also from outward Hurts, or use of sharp Medicines which corrode the neck of the womb, as we knew in a woman that lived long after the loss of the neck of her womb. Also Inflammations turn to Imposthumes, and they into Ulcers, and some are very foul, and there is a sharp flux of the womb that causeth Ulcers. Also malignant Humors in the Terms in foul Bodies, and other Diseases, as in the Pox, and running of the Reins, may cause the same. And somtimes the Seed of a man that is foul long kept in the womb, may do the like. And in Women that have a dead Child, the womb may be cor-

rupted, as I knew in two, who had the Child cut out with the Membranes and Perinæum, or Cawle corrupted, and one lived long after.

The Cure.

The Cure is divers, as the Diseases that cause these Pains, which are Inflammation, Cancer, Ulcer. The cure of Condyloma shall be mentioned in Diseases of the Fundament.

The Cure of Inflammation of the Womb. When the Inflammation is inward and outward, also it must be cured as other Inflammations, with respect to the part, which is very sensible, to prevent pain.

Inflammations in the Womb only must be cured as other inward Inflammations mentioned, taking heed that it turn not to an Imposthume and Ulcer, or Hardness, or Scirrhus, or Gangræn, and corrupt the part. Outward things are best, as in the inflammations of the bottom of the womb as Baths, and Injections, and other things that come directly to the womb. Revulsion, and Derivation, and things taken inwardly are also good; and we must prevent a Scirrhus when it tends to an Imposthume, and if a Scirrhus be, it must be cured as scirrhous Tumors, without pain. If it gangrene, it is incurable, and must be ordered as shall be shewed in Gangrænes.

The Cure of a Cancer in the womb. A Cancer of the Neck of the Womb, because at first it causeth little pain or hinderance, or is not known, or regarded, when it grows up, proves often incurable: Nor can it well or conveniently be cut in that secret part, therefore it ulcerates, and causeth death. But to prevent, you must use a palliative Cure, by which the Patient may live longer: Such as are mentioned in the external Cancer. As by Revulsions and Derivations, by Bleeding, especially in the Ankle, and Purging, and strengthning, and by drying Topicks, and things that digest, as was there declared.

The Cure of a Carcinoma in the womb. The Carcinoma, or Cancers of the neck of the womb must be palliated also, with respect to the part, and the medicines must be put in with the finger, or by Pessaries, or injected, or by Fumes, as in external Cancers.

The Cure of Ulcers in the womb. All Ulcers in the Womb are bad, by reason of the tenderness and moistness of the part, of that a little skin off will require a great Cure. The eating ulcers are worse, which if long lasting, and rooted, and large, are almost incurable, as Carcinoma, which destroy the whole womb, as I shewed: Venereal Ulcers are not cured, except the Pox be cured in general. The Cure differs, in that some are to be applied as to cancerous and venemous Ulcers: Others generally as to all Ulcers.

The end in curing of all, except Carcinoma and Pox, is to cleanse the Body when foul, for Humors will flow to the womb, and moisten it, and make the Ulcers worse, especially if they be malignant, and then they must be corrected by sparing moderate Diet, and Bleeding, and Purging, and Sweating, which doth not only take Humors from the whole Body, but from the part affected: As we shewed in other Ulcers. And if the Ulcers bleed, the Blood must be revelled, as we shewed in the Menstrual Flux. And if in a deep Ulcer, the Matter fall into the Bladder or strait Gut, it must be cleansed as in Ulcers of the Bladder and Fundament.

These things first observed, for the Cure of the Ulcer, if it be only the skin off, or a simple Wound, or Ulcer, it must be only dryed with glutinating means, and the blood stopt with astringents, and the pain abated with Lenitives and Narcoticks, if need be. If the Ulcer be foul and deep, it must first be cleansed, then dryed and healed up, and if there be Corruption, use stronger, as followeth.

We give inwardly such as we give other internal ulcers of the bladder or reins, and such as we give in outward ulcers, with respect to the part: As shall be shewed.

Or this Decoction to heal old Ulcers. Take *Comfrey-roots an ounce, Plantane, Yarrow, Bayes, each a handful; Agnus Castus seeds a dram, white Wine a quart, Honey a pint:* boyl and skum it, till half be consumed, give to drink often, and apply it to the parts, as I shall shew.

Dioscorides saith the Roots of Rhapontick, and small Centaury drunk, cure the Pains and Corrolions of the Womb.

Or Turpentine wash'd in Mugwort-water, or the like, as in Plantane-water, or Rose-water, for an Ulcer, or taken with Honey or Sugar: Some add Pouder of Hysop.

New Milk and Sugar, or Honey drunk, doth the same.

Or *a dram* of Pills of Bdellium of *Mesue*, or *a scruple* every other day, cures the Ulcer of the Womb, and stops the Bleeding.

Or thus: Take *Bdellium three drams, Myrrh, Frankincense, each a dram; Sarcocol, Storax, Amber, Clubs Myrobalans, each half a dram; red Coral two scruples, with Syrup of Poppies, and a little Opium,* (if the pain be great,) make Pills: Give *a scruple* every other day.

For pain, the Troches of Alkekengi, with Opium, are good.

Or this Pouder to stop Blood, and heal. Take *Acacia, Hypocistis, each a dram; Sanguis Draconis, Starch, Plantane, round Birthwort, each half a dram; Earth of Armenia or Lemnos a dram, Mastick, or Sarcocol, each half a dram:* make a Pounder, give *a dram with Milk, Shepheards-purse, Plantane, Rose, or steeled Water.*

Use warm Injections to cleanse, and dry after, and heal.

As, three ounces of Barley boyled in two pints of water or Whey, with Sugar or Honey, or of Hydromel alone, Honey and Wine, which is strongest.

Or a Decoction of Barley, Lentils, Beans, Smallage, Pellitory, Plantane, with Honey.

Against Foulness. Take *Hydromel half a pint, Juyce of Smallage two ounces, Myrrh a dram.*

Or use a Decoction of Orris, Birthwort, and Sowbread, Lupins, Orobus, Horehound, Wormwood, and Centaury.

To cleanse, add Lye, Urin, and Wine, or a little Allum.

The Juyce of a Nettle, and Urin of a Boy, cures the Ulcers of the Womb.

Also the Gall of an Ox, Goat, Carp, with Honey, and Goats Milk.

Or Unguentum Apostolorum, or Ægyptiacum.

Or the like Cleansers used in outward Ulcers, and Dryers.

A drying healing Decoction is made of Comfrey, Snakweed, Plantane, Agrimony, Shepheards-purse, Horstayl, Sanicle, Mousear, Pyrola, Yarrow, Knotgrass, wild Tansey, Bramble, Myrrh, Olive, Ceterach, Shrub, Sumach, Rose of Jerusalem, Wall-sage, Swallow-wort, Rock Comfrey, Roses, three handfuls or four, Grape, Plantane, and Myrrh seeds *an ounce:* boyl them in steeled Water for an Injection.

Or add Galls, Cypress-nuts, Acorn-cupps, Peels and Flowers of Pomegranates an ounce, which are good to stanch Blood, or red Wine, or Syrup of red Roses, or Honey to cleanse.

You may use the Decoction mentioned for an Injection.

Or Juyce of the Plants mentioned, with Honey.

Or half an ounce of the pouder of the Plants mentioned, with the Ashes of Reeds, Gourds, or Spunge, or of Eg-shells.

When we desire to dry exceedingly use Litharge, Tutty, Cerus, Bloodstone, Calaminaris, Bole *two drams, and Sanguis Draconis, Acacia, Hypocistis a dram,* for once injecting.

Or

Or this incarnative Pouder. Take *Orris roots, Birthwort, and Comfrey, each a dram; Myrrh two drams, Aloes a dram, or a dram of Frankincenſe, Sarcocol, Mummy,* put into the Injection.

Or add to this Pouder *two drams of Turpentine, with Plantane-water waſhed, and diſſolved with Honey, and the Yolk of an Eg.*

Or uſe Unguent of Pompholigos, Ceruſs, or Lead, ſix drams for one doſe in an Injection.

To allay pain, and heal alſo. Uſe,

All ſorts of Milk to cleanſe, heal, and abate pain. And they will dry alſo, if you quench Flints therein, and abate pain more, if you add Mucilage of Fleabane, Line ſeed, Quinces, and Infuſion of Gum Traganth, and Arabick, and Whites of Eggs, and Yolks ſomtimes: And in great pain a little Opium. And if you will cleanſe alſo, Honey or Sugar.

A Decoction to allay tearing and burning pain. Take *Barley a pugil, Fænugreek and Line-ſeed an ounce, Fleabane, and Poppey ſeed, each half an ounce; the four great cold Seeds ſix drams, Roots of Marſh-mallows and Mallows, each a handful; Dill a pugil*: boyl them *in Milk and Water*, adding *Honey and Sugar*,

If you add *Purſlane an handful, Water-lillies a pugil*: the Heat will be better abated, and the Pain leſs, if you ad *half an ounce of Mandrake roots, and Henbane ſeeds two drams* to be boyled therein.

Alſo Juyce of Purſlane, Lettice, Nightſhade, Plantane in Milk, or their diſtilled Waters.

Or the white Troches of *Rhaſis*, with Opium diſſolved in Milk, or the Decoction mentioned, take away pain, and heal.

Add Oyls if need be, as of Roſes, Poppies, Henbane-ſeed; or of Lovage to aſtringe.

AlſoFomentations andBaths are good,for their ſtrength reacheth to the inward parts, and heals the Ulcers. They are made as the Injections, by chooſing things proper to cleanſe, dry, and take away pain as you pleaſe. And for drying, we add Metals, as Filings of Iron, and the like.

Alſo drying Baths of Allum, and Sulphur in old ulcers, and we ſend the deſperate Women in this caſe to the Spawes.

Alſo we make Peſſaries, and thruſt them with the finger into the hollow of the Womb to cure Ulcers.

Or an Anodine of Gooſe greaſe,or Hens greaſe,orHogs, or Dears ſuet, or Wool greaſe, with white Wax, and the Yolk of an Eg, and Mucilages, and Saffron, and Oyl of Opium.

Dioſcorides puts into Peſſaries,Leaves of Vervain,cream of Henbane ſeeds, and Juyce of Mandraks.

To cleanſe; Take *Turpentine waſhed with Juyce of Smallage half an ounce, Myrrh a dram, Birthwort roots two drams, Sugar half an ounce*, make *a Peſſary, with Gall of a Beaſt, or Allum*, it will more cleanſe.

You may uſe Anodine Oyntments alſo.

Or Dryers mentioned, with Pouders, or Juyces, and with Mucilages, and Wax.

Or Fumes that pierce into the womb, and dry Ulcers, as in the Noſe, for which are Fumes mentioned, and they which are ſtrongeſt, and of worſt Scent, may be beſt uſed here.

If theſe Ulcers come from the French Pox, they cannot be cured without a general Cure of the Pox. And then the Fume of Cinnabar doth all together. And the Oyntment of Quick-ſilver is good to be put into the part. All which ſhall be declared in the Cure of the French Pox.

CHAP. XV.

Of Diſeaſes in the Fundament.

The Kinds.

THe Diſeaſes or in inward Pains of the Fundament, are ſuch as are in it when cloſed in the end of the ſtrait Gut and Muſcles about it, we mean not the Cleſts in the outward part, which ſhall be mentioned in external Cures with thoſe of the Lips. The kinds of the Pains are from the Senſe of the pain and ſwelling.

A burning and hot pain in the Fundament.

There is ſomtimes a pain there, with Burning alone, or with a Tumor. And this is called the Inflamation of the Fundament, when it is inwardly hot, ſwell'd, and red, and outwardly ſometimes. This pain is increaſed by touching, ſitting, going to ſtool, eſpecially with ſtraining. The Belly alſo and Urin are ſtopped,by the tumor and heat. And this Inflammation leaves ſomtimes an Impoſthume, or the like in the Veins, which coming from other Cauſes, have an Inflammation. As alſo the Falling out of the Fundament hath; which alſo I obſerved in a Child of a year old, turned to a Gangræne, and cauſed death. All theſe may be known by touching and ſight, when the Gut is turned out.

The blind Hæmorrhoides.

The pain in the Fundament with a ſwelling,and no Inflammation but what is from pain, is called the *Hæmorrhoides*, becauſe it comes from the Veins ſo called, and it is called blind, when they bleed not, but it may better be called cloſed or painful. In this upon ſtraining there is a tumor appears; or elſe it lyeth deep, and is only felt by the Patient. This pain is ſometimes great, from the Excrements going forth, with an Inflammation ſomtimes,which produceth bleeding, or open Hæmorrhoids, which are dangerous from their great Flux ſomtimes. As I have known in two Profeſſors, which from a ſedentary life, had the Hæmorrhoids, and died of their great Flux and Inflammation.

The Tumor called Condyloma in the Fundament.

A Pain in the Fundament with an uneven Swelling, like an Excretion that comes by degrees not ſuddenly as the Hæmorrhoids, is called *Condyloma*,becauſe it is like the Joynt of the Finger,this we ſhewed may be in a Womans Privities alſo, and the Fundament in both Sexes. It is more painful when there is Inflammation. If this Tumor appears outwardly, is called *Ficus*, being like a Fig, or *Verruca*, or a Wart, which hanging down is called *Thymus*: Somtimes it is like a Grape or Mulberries. I have ſeen it rough and hard, like a Cocks Comb. And it is either alone, or joyned with the French Pox.

An ulcerous Pain in the Fundament.

A Pain with ſenſe of an Ulcer in the Fundament is within, and differs from that which produceth a Teneſmus or Needing, becauſe there is not ſo much ſtraining. In this being foul, there is Matter voided alone, or in the firſt Excrement at ſtool. Somtimes it is hollow, and a Fiſtula, as goes either to the Womb and Bladder, out of which parts it after floweth, and ſometimes it is piſſed forth. And when the Patient farteth, it cometh forth of the womb, if the Ulcer be there. Alſo Ulcers of the womb, and neck of the bladder, as was there ſhewed,have gone ſometimes before, and ended in an Ulcer in at the Fundament. Hither are alſo wounds to be referred, which firſt bleed, and after turning to Ulcers, ſend forth Matter.

Diſ-

The Cauſes.

Diſeaſes that Cauſe pains in the Fundament are either Inflammation, or Hæmorrhoids, or *Condyloma*, or Ulcer.

Inflammation is the cauſe of burning in the Fundament.

Inflammation cauſeth burning pain with ſwelling or without, and it is grievous, becauſe the part is very ſenſible. And it may come from the ſame Cauſes, as a Teneſmus or needing when the ſtreight Gut is ulcerated, and from other outward hurts, as a wound or ſtroak or from wiping the Arſe with a paper that hath had Pepper in it, as I knew, or with the Hand that had Ginny pepper, as I knew in one that complained from thence of the fire of Hell, as he ſaid.

The blind or painful Hæmorrhoids, from the Veins in the Arſe, which bleed in ſome, as the Veins of Womens Privities at certain times, is with a ſwelling, not that the Vein it ſelf is pained ſo much, being not very ſenſible, but becauſe the parts adjacent are ſtretched and pained which are very ſenſible: this is greater with inflammation when the part is extended. Therefore when blood is brought to the end of the Veins to be purged by the Hæmorrhoids, if the mouths of the Veins be not open from whence the Hæmorrhoids are called blind, or when they open with difficulty, the blood being ſtopt and increaſed and laboring to get forth, forceth and teareth the Veins more or leſs as it is in quantity And they feel moſt pain when the Hemorrhoids firſt break forth. Becauſe the Veſſels were never opened before. And when the blood would get forth at ſome external Vein in the Fundament, It is hard to be opened, becauſe the Mouth of the Vein is made hard by the hard Excrements. But it gets eaſier forth when it opens a Vein in the broad part of the ſtreight Gut, where they are ſofter. But theſe mouths of Veins may be hurt alſo by hard Excrements or other ſtraining, as we ſee in Women in travil, who have the Hæmorrioids. This pain from the cauſes aforeſaid is greater, when the blood ſtopped, is ſharp or Malignant. And alſo the ſwelling Hæmorrhoids have divers forms, according to the diverſity of the mouths of the Veins and Fleſh and Blood thereabouts.

An evil Humor is the cauſe of condyloma in the Arſe and Privities of Women.

Condyloma cauſeth pain in the Arſe Privities of Women alſo, for the parts are alike Nervous. And we know the Humor to be Malignant, when there are Ulcers in the Privities and Groyns, and alſo *Condylomata* in the Privities and Arſe. This Humor being venemous is infectious and breeds Figgs or Warts or other Excreſcences. And how this comes to paſs we ſhall ſhew in the French Pox, *Bubo* and *Cancer*.

An Ulcer or Wound in the Arſe, cauſeth an Ulcerous pain.

An Ulcer of the Arſe is ſomtimes the cauſe of pain and matter voided, this comes from an Inflamation turned to an Impoſtum that brake, and ulcerated and when it is deep it is foul alſo: or from a foul Ulcer in a Teneſmus, or from the cauſes that produce Inflammation and Ulcer there mentioned. Or from an Ulcer of the Neck of the Womb or Bladder that eateth thither. Or from a wound by external or internal means.

The Cure.

The Cure is in order according to the Diſeaſe, the Hæmorrhoids, *Condyloma*, Inflammation and Ulcer are cured divers waies.

The Cure of the blind Hemorrhoids.

The blind Hæmorrhoids (by which we mean a ſwolen Vein in the Arſe that is ſtopt and ful of pain) if it be not well ordered, will be inflamed and cauſe an Ulcer and other diſeaſes.

This may be prevented when it comes with eaſe and is not hindered at its uſual time but furthered, as we ſhewed in ſtoppage of Hæmorrhoids.

It is cured by turning away the blood which is the cauſe and nouriſher of it, and allaying the pain to prevent Inflammation, and then by drying and diſcuſſing the Tumor. And if it Ulcerate, it muſt be cured, as other Ulcers.

We muſt revel the blood that it may not flow to that part to ſtretch or inflame it, eſpecially if there be then an Inflammation by opening a Vein in the Arm, and then derive it by opening a Vein in the Foot, Ankle, or Ham.

Or by Cupping the ſides, to revel; and the Hips to derive.

Or by Leeches to the Fundament, if pain or Inflammation forbid not.

The Belly muſt be kept looſe that the Excrements may not hurt being hard, and by ſtraining; With fruits and herbs in meat and broaths, or with Caſſia, Manna, or the like. Or with Clyſters, if they can endure the Pipe.

Or with the Decoction of Reſtharrow, conſume them according to *Dioſcorides*.

Or give the Pouder of Moulin with Milk, to abate the ſwelling alone, or with Barley meal as much, or fryed with Eggs and Butter for ſome daies, which is a ſecret.

Or the juyce of Moulin alone, or with Penidies, or in a ſyrup, or with Liquoriſh Pouder, make an Electuary thereof.

Alſo Bdellium and Galbanum ſoftned with ſyrup of Plantane or Mullein and made Pills give a dram.

Or Narcoticks in great pain.

Topickes are applied with a Tent, or if liquid by a Syringe, or by ſprinkling, or blowing them in.

Anodynes abate pain and heat alſo, with Stupefactives, many whereof conſume the Piles.

Boyl yellow Quinces, or Herb True-love in Oyl. Or make Oyl of Gourd ſeed, Poppy, Henbane, or yolks of Eggs, or Indian Nuts, or De-been, or Jeſamin.

Or uſe this Liniment of Oyl of Roſes, Violet water Lillies, Willows, or Lineſeed, or ſweet Almonds, with other Anodynes, or freſh butter, the yolk of an Egg raw or roaſted.

You may add Gooſe greaſe, or Hens, or Hops, or the greaſe of Goats, or Dears kidneys, or Marrow of a Veal bone, Pomatum, or Æſypus, or white Wax waſht to make an Oyntment.

Mucilage of Fenugreek, Linſeed, or white of an Egg.

Pouder of the rinds of Mandrake, Henbane and Poppy ſeed, and if pain be great to four ounces of the Oyntment a dram of Opium and half a dram of Saffron.

Or uſe Populeon with Opium, when there is heat, or Saffron.

Fomentations and injections, are made of Mallows, Marſh-mallows, Mulleine leaves and flowers, Chamomil, Melilot, Dill, Elder flowers, VVater-lillies, and Violets, and Fænugreek and Linſeed boyled in water or fat broath or with Oyls.

And you may make Cataplaſms of the reſidents boyled in Milk.

Thus: Take *crums of Bread and Barley, or Spelt*, boyl them in *Milk and with Oyl of Roſes, Violets or Butter and yolks of Egs*, make a Pultis, you may add *Papp of Apples and Mucilages of Time, Fleabane and Althæa and Saffron.*

Or fry Purſlane, Nightſhade, Poppy and Henbane in Oyl,

The Juyce of Veal is a good Anodine.

Give Digeſters to conſume them, and if they prevail not, then Dryers, that bite not, if there be pain.

Or make Cataplaſms of Mullein, Clowns-All-heal, Plantane, black Hawkweed, Scabious, Crownwort, Yarrow, Shepheards rod, Dogs-tongue, Horehound, Leeks, Coleworts bruiſed or roaſted in the Embers, and mixed with Butter or Oyl. *Matthiolus* commends the Oyntment of Scrophularia.

Or this: Take *Lillies two ounces, Orris an ounce, Moullin, Scrophularia, each three handfuls, Flowers of Chamomil, Melilot Dill, St. Johns-wort, each a pugil; Dates ten, with Snails, without ſhells:* boyl them *in ſteeled Water,* ſtamp, and add *Fænugreek and Line-ſeed, each an ounce; Butter two ounces, Myrrh, Frankincenſe, each two drams; Saffron a dram, yolks of Eggs four,* make a Cataplaſm.

Or apply roaſted Onions, or Leeks, with Oyl of Roſes or the like; or with Dragons, or Cuckow pintles, and Oyl, leaſt they burn, or alone, if they may be endured. All theſe may be mixed with the former Cataplaſms.

You may foment with a Spunge, or a Bag, with the decoction of the aforeſaid, with Dates, and Snails, to nouriſh, and with ſuch as conſume and dry, as Sumach, Bramble, Pomegranate peels and flowers, Galls, Roſes, Myrtle-berries, and the like mentioned in Ulcers of the Neck of the Womb, with ſteeled water, and red wine.

Or anoint with Oyl of Chamomil, Melilot, Dill, St. Johns-wort, Lillies, Olive, in which are boyled Raddiſh-ſeed, Spurge ſeeds, or Earth-worms, or Hog-lice, or Sows, or Wood-lice, or Horſleeches, or red Snails without ſhels, or with Oyl of Bricks.

Or make a Liniment of the Plants mentioned, with Smallage, or Parſley, or Yarrow, Juyces. Or beat them with Turpentine in a leaden Mortar, and wax.

Some fill a hollow Onion with Oyl, and Verdigreaſe, and roaſt it, and anoint with the Juyce.

An Oyntment. Take *Frankincenſe, Maſtick, or Myrrh, each two drams; Bdellium, Lycium, or Juyce of Sumach, or Hypociſtis a dram, Saffron a ſcruple, Mucilage of Fleabane, and Gum Traganth, each half an ounce; a Yolk of an Eg, with Oyl of Roſes,* make a Liniment. If there be pain, ad *a dram of Opium, or Oyl of Henbane ſeed,* which alſo conſumes them.

To dry more, add *Ceruſs, waſht Lead, Litharge, Tutty three drams, the Arabian Stone according to* Dioſcorides. *And in a leaden Morter, with Mucilage, and white Wax,* make an Oyntment.

It will be ſtronger with Vitriol, burnt Allum a dram, Verdigreaſe, or Ruſt of Iron a ſcruple, Camphire half a ſcruple.

Give a Suppoſitory, or Suet, the Yolk of an Eg, white wax, and a little Opium.

Or make a Fume of the Decoction hot, or take in only the Fume of Moulin boyled, to eaſe the pain.

Or ſprinkle the Pouder of Darnel, Moulin, Scrophularia upon Coals, or hot Bricks, or Iron, and take the Fume to dry. It is better with Brimſtone, or with Honey anacardine.

Some ſay it is good to ſit upon a Stool, made of Pine-tree, and anointed with Oyl.

The Cure of Condyloma in the Fundaments & Privities.

When a Condyloma comes from unclean Copulation without the Pox, then after purging, and bleeding, and ſweating, apply Topicks, as in other malignant Humors. If it be in the Pox, then cure it as the Pox, by purging and ſweating, and if they remain, the Diſeaſe is not wholly cured, and then uſe Topicks in the Cure, mixing things that are proper againſt the pox.

Uſe the ſame Topicks to digeſt and dry, as in the ſwollen Hæmorrhoids, eſpecially the ſtrongeſt, becauſe theſe are harder, and the pain leſs, adding ſtronger Ingredients.

Alſo the Cataplaſms and Fomentations there mentioned, as Scrophularia, Moulin, Plantane, Bramble, Pellitory, Mercury, Winter-creſſes, Savine, Horehound, Maiden-hair, Roſemary, Time, Savory, Rue, green and bruiſed, or boyled with red Wine, or ſteeled Water, or water and Vinegar, or Lye, and applyed with a Spunge, or Bag: or ad Roots of five leaved Graſs, round Birthwort, and Bay-berries, and other Dryers, as Salt, or Peeter, raw Quinces may be added according to *Dioſcorides.*

Sheeps dung, or Hens dung, with the Gall of a Goat, Soap, and Vinegar mixed, are good.

Or diſſolve Tarr, and Ammoniacum in ſtrong Vinegar.

Or uſe the Oyntments for the Piles.

To which add this: Take *Juyce of Winter-creſſes, Smallage, or Parſley, each an ounce and half; Oyl of Brick two ounces, Bole a dram, with Turpentine* make an Oyntment.

Or, Take *Oyl of Tartar half an ounce, Lapis Calaminaris, Bloodſtone, or red Lead two drams.*

Or, Take *Vine aſhes, and Dill aſhes, each a dram and an half; Gum Ammoniack diſſolved in Vinegar a dram, Allum two drams, Bloodſtone, or Minium a dram, Galls half a dram, Saffron a ſcruple, a Yolk of an Eg roaſted, Turpentine a dram, with Oyl of Roſes and Wax* make an Oyntment.

This is ſtronger. Take *Quick-ſilver two drams, Turpentine an ounce, Oyl of Nuts two ounces, red Lead two drams, Allum, Vitriol, each a dram; Verdigreaſe half a dram, with Wax* make a Liniment, add a little *Sublimate.*

A Pouder to dry and conſume it. Take *round Birthwort a dram, dryed Savine two drams, Aſhes of Hermodactls, and Myrobalans, each a dram and half; Allum a dram, red Vitriol half a dram, red Orpiment a ſcruple, with Opium, and Mandrake roots* make a Pouder.

Or uſe Sublimate boyled in Water, or Oyl of Vitriol, or of Antimony.

A cauſtick Oyl to conſume the Condyloma, Fiſtula, Scrophulus, and any Excreſcens of Fleſh without pain. Take *Oyl of Bricks, Maſtick, and Gum Arabick the beſt, and Turpentine, each three ounces; diſtil them in a Glaſs Alembick, and mix the firſt Water with Aſhes of Ivy,* and ſtill it again, keep the Water.

Fumes taken in, do dry up a Condyloma, ſuch as we mentioned for the Ulcers of the Note. Chiefly of Cinnabar, as in the French Pox.

Sometimes they are cut off, when they are hard, as warts, or if they be long, they are tyed with Hair or Thread to rot.

The Cure of Inflammation of the Arſe-hole.

Inflammation in the Fundament alone, or with Piles, or Condyloma, is cured as other Inflammations in Womens privities, and if it turn to an Ulcer, as an Ulcer.

Therefore we let blood in the Ham, to derive and cup to revel and derive, when we fear a Flux to the part.

We looſen the Belly that the Excrements may not hurt. Clyſters are not eaſily given.

We alter with cold and moiſt Diet and Medicine. *Dioſcorides* commends the Water of Lens paluſtris to be drunk.

We uſe Anodines at the firſt, becauſe the part is very ſenſible of pain, and we cool without binding much, leaſt the part ſhould be exaſperated, with things againſt piles mentioned, that eaſe pain, and ſtupefie, and cool, as Oyntments, Baths, Fomentations, Cataplaſms.

A cool Oyntment. Take *Juyce of Purſlane, Plantane, Groundſoyl, each three ounces, Mucilage of Fleabane an ounce, the Yolk of an Eg roaſted, with Oyl of Roſes, and Violets,*

A Pultis: Take *Comfrey roots, Althæa roots, each an ounce; Plantane, Moulin, Groundſoyl, Sowthiſtle, each a handful; Melilot flowers, and Roſes, each a pugil; Fænugreek and Line-ſeed, each half an ounce;* boyl and ſtamp them, add *Flower of Lentils a pugil, Oyl of Willows, Roſes, and Violets, each an ounce; Saffron a dram.*

In the end, uſe Diſcuſſers, and if Hardneſs appear, Softners, and conſume the reliquies as in other Inflammations.

The Cure of ulcers and wounds in the Fundament.

An Ulcer or other Solution of Continuity in the Arse-hole, being a sensible part, is very troublesom, and will scarce be cured in so strait and moist a part: If it first ulcerate, it is worse, and worse yet, if it cancerate. If it be a wound, cure it as a wound. If the Ulcer come from a wound or Inflammation alone, or with the piles, after purging, by which alone Ulcers are fitter to heal; Do thus,

Drink Milk often and much, or such things as are good against wounds, when there is a wound, as vulnerary Herbs. Bettony is highly commended in this case, and Mullein any ways taken, is good in al Diseases of the Arse-hole, & other things mentioned in the Ulcers of the Womb, as pills of Bdellium. And if Blood flow from the wound, use the pouder there mentioned.

Topicks may be used as in Ulcers of womens privities, because the part is very sensible and tender, as they, and will not admit of other Cleansers and Dryers, then are there mentioned, except such Dryers as are mentioned for swollen Hæmorrhoids: And if there be a pain in the ulcer or Inflammation feared, use the things against pain, prescribed in Ulcers of the womb and Hæmorrhoids, as pessaries and Fumes.

Besides which, the Roots of Carduus boyl'd in wine, cures the Ulcers in the Fundament: And Raisons beaten up with Rue, if they be foul and cancer'd.

Or Oyntment of Minium, Litharge, or Chalcitis called *Diapalma*.

And if there be a Flux of Blood, use such things as are mentioned for stopping of Blood in other Fluxes.

CHAP. XVI.

Of Pain in the Habit of the Body.

The Kinds.

WE call those Pains in the Habit of the Body which are within the Skin, either in the soft or fleshy, or hard, or bony parts. They are of divers sorts, some are greater, and others less then their accidents.

Of Pains in the Habit of the Body which have prevailing accidents that are greater then themselves.

We shall mention only by the way those pains whose accidents are greater, because we spake of them in their places. As in Hurt of the Functions, when there is pain joyned, as pain of weakned Motion, mentioned in Laziness, voluntary, and after labour; this pain is ulcerated, inflamed, stretching, or beating. Besides, there are somtimes in some kinds of unmoveableness, as in that kind of palsie, where the Sense of Feeling remains, with a pricking, or vehement pain. Also there are divers pains in the Cramp, especially when it is from wind: As we shewed concerning a moving pain in the Cramp of many years continuance. Also there is pain in Fractures and Dislocations of Bones: All these are spoken of in impotent Motion. And in Depravation of Feeling, there is a pain in divers parts from a false Sense of Cold or Heat. And we shewed in Feavers, that there might be pains, as if the Limbs were bruised or broken. Also pains inwardly may come forth as in the Head-ach, the pain may reach to the Eyes, and and other pains may come to the Neck, Breast, and Belly, as we shewed. And we shall shew how some superficial pains go over the whol Body. And others are from evil Conformity or shape.

Of pain in the Habit of the Body which are greater then their accidents.

Those pains which are in the Habit of the Body greater then their Accidents, are chiefly distinguished as they are in the Flesh, Joynts, or Bones.

Of Pains in fleshy Parts.

The Germans call the pains in the fleshy parts of the Habit of the Body, *die Fluxe*, from the cause that is Defluxion, Distillations, or Catarrhs. Of which we shall declare divers kinds, in parts not fleshy, from the Joynts.

Of Defluxions or Distillations in the Habit of the Body.

These Pains or Defluxions are sometimes in the Cheeks, Chapps, or about the Ears, with Swelling, or without.

Or in the sides, or behind the Neck, with difficult turning of the Neck, or a Creek, and Swelling of the Glandles. And if there be difficulty of swallowing, it is a bastard Quinzy.

Also there is a pain from Defluxion in the fleshy sides of the Breast, heavy, and tearing, that increaseth with touching, or Motion of the Arms, and hindereth breathing. And if it be pricking, it is a bastard Pleurisie, if the breath be much stopt, it is to be referred to Dyspnæa, or difficulty of breathing.

These pains from Defluxions, are also on both fleshy sides of the Back, either above, towards the Neck, or below towards the Loyns. And are increased by Motion of the Back-bone, or by lying down, or pressing, but if they endure touching; they are spoken of in internall Pains.

These pains from Defluxion, are also in the fleshy parts of the Joynts, in the Arms, or Feet, and in the Nervous parts, if they are about the Shoulder blads, or fleshy parts of the Hipps, they are referred to pains in the Joynts.

Pains in the Joynts, Arthritis, or Joynt-gout.

A pain in the Joynts is called *Arthritis*. And it is either more general in many Joynts, as in the Feet, Arms, Hands, Hips, Shoulders, reaching to the Back, and Neck, and somtimes to the Cheeck-bones, and Joynts. Or it is more particular in some small or great Joynts, as in the Hip called the *Sciatica*. That in the Shoulder is called the pain of the *Homoplate*; when it is in the small Joynts, in the Toes, or Foot, or Ancles, it is called *Podagra*; when in the Knee, *Gonagra*; when in the Fingers, Thumb, or Wrists, *Chiragra*. This Disease seldom is constant in the Shoulder alone, as in the Knee; and if it be there, it is called *Arthritis*, when other Joynts suffer also. Some of these kinds of Gouts have the same accidents.

The Sciatica, or Hip-gout.

Pain of the Homoplate, Podagra, Gonagra, Chiragra.

Sometimes there is a great pain fixed in one or more Joynts. That which is in the Hip is first fixed, then moveth from the Thigh into the Foot, and that in the Shoulder, in the Arm. In all kinds, the pain is increased by Motion of the Joynt, and touching, except in the Hip and Shoulder, and then when the pain comes outward. These pains come suddenly unto some.

There is usually a Tumor with Redness, Heat, and beating, in the Podagra, and Chiragra, first or last; and somtimes in the Gonagra, or Arthritis, especially in the Joynts without Flesh. Somtimes it is an Oedema without Redness. But in the pain of the Shoulder and Hip in the fleshy parts there is no such appearance or tumor.

In continuance of time in the Podagra, and Chiragra, there will be knots in the Joynts of the Fingers and Toes. And when they are opened, there comes forth a thin or tough white Matter, or like Chalk. And somtimes they turn to hard uneven stones, which hinder the Motion of the Joynt. And I have seen sometimes such knots from the bending of the Arm to the Wrists, growing as it were together, and when they have been broken, there hath come forth a white Pultis, and in one troubled with the Gout, it was in his Ear. And another Merchant long and grievously

vously troubled with the Gout. The same kind of chalkie Matter was all over his Body, and the very Eye-brows also, and it turned to knots, and then came forth.

As we shewed in Feavers, there is a Synoch in every general Gout, and often in the *Podagra*, *Chiragra*, and *Gonagra*, and sometimes in the Hip and Shoulder-gout. It begins first with Chilness, and there is Thirst and Restlessness, the Pulse is high, and the Urin red.

There are sometimes other accidents in Arthritis. And we have known a Cramp to follow the Joynt-gout which hath been worse then it self.

Pains about the Bones. The pain about the great Bones (besides that which is in parts without flesh, of which we spake in the Pain of the Joynts, and that without the Skull of which in Head-ach) is of two sorts. The one is chiefly about the Head bones, the other is about many other Bones.

An external Cephalæa. There is a kind of pain about the Head or Forehead, which is lasting, which is called an external *Cephalæa*, or Head-ach, differing from the internal mentioned. This is about the Bone, and is augmented by being touched. It sometimes springs from an internal Head-ach, or is joyned with it, or is alone outwardly on both sides, or on the right or left, as a Hæmicrania. Sometimes it is like a Nail driven into one part, and called *Clavus*. Sometimes it makes Nodes in the Forehead, like that in the French Pox, and in other Bones.

Clavus.

Outward Heavinesse of the Head. There is another kind of outward pain in the Head, which goes before other pains from Defluxion, into the Joynts and fleshy parts. In which something seems to lye heavy upon the Head, and there is outward, as if the skin were flead off, and increaseth with touching of the Hair especially. And oftentimes there is a Swelling soft and œdematous, broad, and dispersed about the Neck, and hinder-part of the Head, and other accidents, as in the Heavinesse of the Head, coming within the Skull, especially when they meet together.

The French Pox or Neopolitane. There is another kind of pain about many Bones from a Disease not known by the Antients that was brought from the *Indiies*, first called the *Neopolitane*, then the French Disease: And because it comes by Copulation, the Venereal Pox. Of which there are divers kinds, as I shall shew, and this pain about the Bones is one, and is called the contagious Pain or Pox.

The contagious French Pox.

This pain being near about the Bones, is chiefly in the middle Seat without the Flesh, either in Latitude or Longitude, as in the naked inside of the Leg, and about the Shoulders, Homoplate, and Arms, and before, in the Breast, which bony part can scarce suffer from another internal Cause. And therefore the Pox is known only by this sign sometimes. Also there is pain without in the Head, especially in the Forehead to the Eye-brows, and about the Temples, fixed like an outward Cephalæa.

This pain is violent and implacable, pulling as it were the skin from the bones, and not to be touched. It increaseth towards night, and is not abated as other pains, but augmenteth by heat. And therefore in bed they are worse, and it comes by degrees, not suddenly as Arthritis.

Sometimes there are hard Tumors or Nodes in the Forehead, Skins, and insides of the Hands, which are unequal and increase.

And other accidents, as Falling of the Hair, Spots, Pustles, and Ulcers, as we shall shew,

The Causes.

It is necessary that in all Pains of the Habit of the Body mentioned, that the sensible parts be affected as the Muscles, Membranes, and Nerves, from whence come stretching pains, or pains from compression, solution of continuity, simple distemper, congestion of Humors, Influxion, or evil Quality.

Distention or Stretching, is the cause of pain, where other Symptoms are greater. Vehement Stretching of the parts causeth this pain, by immoderate Motion in Exercise and Labour: Hence comes the stretching lazy pain mentioned. And violent motion, when the Muscles are contracted with the Cramp: As we shewed in Spasmus. Also it comes from Extension of the Muscles by straining, which cause Bleeding, such as is in inflamed or ulcerated Laziness, or such as increaseth by touching and motion. This pain is sometimes in the broad Muscle of the Breast, which moveth the Arm, coming from strong holding of the bridle in riding; sometimes in the Feet and Knees, from riding in short Stirrups.

Or in the Back, from stretching of the Membranes and Ligaments, by the great Bowels lying upon them; or by a Tumor, as in divers Diseases of the Liver, Spleen, Guts, Mesentery, and Womb, and in women with child, as we shewed.

Or it is from wind that it bred by moisture or weak heat, or coming from other parts, which lifteth up and stretcheth the muscles, as we shewed in windy Cramp. And if it be between the membranes, it is a pain like that from Defluxion, but not so fixed, but wandring, and stretching, and not long lasting. And if it come to the skin, the pain is with palpitation or beating, as we shewed.

A Compression is the Cause of pain in which the Symptomes are greater. Also Compression of the parts may cause pain without breaking of the skin which if it is, belongs to Diseases of the skin. As from long lying in a great Disease, when there is a pain in the Back, and in other sensible parts; and from external violence, as when from pressing of the Elbow, there is a numness and pricking of the two Fingers.

Or when the Bones are out of their places, and lye upon the Muscles, Membranes, or Nerves, there is pain, which is greater and longer, when there is Swelling or Heat, as when there is a great pricking pain, from a violent motion of the Back or Neck, or from Bones out of Joynt, while they lye upon these parts, and hinder motion: As we shewed in want of Motion from a Dislocation.

The same pain may be from broken Bones out of their place, which tear the parts, and hinder motion, as we shewed in want of Motion from a Fracture. Or from the Spondils of the Back broken out, which cause Pain, Swelling, and Ulcers, before they come forth; as I knew in a Child of seven years old, who was born crook-baked, and had a Tumor in his left Shoulder, out of which came many small bones of his Back, with much matter.

Rupture is the cause of pain in the Hernia. Solution of Continuity internal in a sensible part, causeth pain, as when the Membrane about the Belly is broken: Especially when the guts come forth, and there is an Hernia. As for other sensible parts, as Muscles and Nerves, they can scarce be broken without an external force. Of these we shall speak in the Diseases of the Skin.

Distemper causeth pain, with other Symptoms joyned. Also Distemper causeth pain, whether cold or hot. If it be outward, it is to be referred to Diseases of the skin; if inward, it comes from Defluxion, or congestion of Humors: as shall be shewed. And in the Fits of Agues, the pain felt in the Back and Members, comes first from Cold, and then from heat, because the Cause lyeth in the great Vessels which are near the Back, and inflame the Nervous parts.

Congestion of Humors causeth an external Head-ach.

An Humor heaped, which is corrupt from evil Nourishment or Weakness of Concoction or crude, causeth pain in the bloodless parts, about the Bones, Periostium, and Membranes; where by reason of Cold, they are more eatily heaped up, and more slowly discussed. This is often in the Head, between the skul and skin, by reason of the plenty of Veins, which afford Excrements, which cannot easily be discussed, by reason of the thickness of the skin: Hence comes Cephalæa or Heach-ach external. This may be in other places upon bare Bones, like that in the French Pox, with Swelling, and Nodes, when the Nourishment of the part aboundeth, and turns to a Callus: as shall be shewed in external Tumors.

Congestion of Humors, causeth outward Heavines.

Congestion of Humors causeth the Joynt-gout.

Also when these Humors are heaped without the Skull, there comes a pain external, which goes before Defluxions, and Joynt-gouts.

The same Excrements about the bloodless Region of the Joynts, not flowing from other parts, may cause a kind of Joynt-gout. This comes by degrees, not suddenly, as that which comes from a Defluxion, nor doth it cause great pain, and the tumor is only œdematous. This Arthritis or Joynt-gout seldome comes first, but follows the other, which comes from Defluxion, when the part is weakned, from which Defluxions & new Excrements are gathered. Hence they are free from the Gout, but there is some sign of it, either from Defluxion or Congestion of Humors. Or if there be another kind of Arthritis from both, as a *Sciatica*: It lasteth long, and hath great changes.

A Defluxion of Humors, causeth the Joynt-gout and other pains.

A Defluxion of Humors causeth sudden pains, and they are either simple Defluxions, or Arthritical. The Humors either flow from within the Vessels, or otherwise.

Humors congested without the Vessels that cause these two sorts of pain, are supposed either flegmatick or waterish, but a waterish Humor, or pure Whey flowing to these parts, causeth resolution or tumor without pain, rather then with great pain. And therefore it must be mixed with other Excrements, and then as it is more cholerick, sharp, or salt, or evil, it stretcheth and tearing the part more or less, and causeth pain accordingly..

The Original of this serous Humor comes from the Head, and flows downwards. And it is somtimes congested in the inward part thereof, within the Skull from the Blood which is plentiful in the Head, when it is crude or impure. And when any part thereof is unfit for Nourishment, and will not be concocted, there are Excrements in the Brain, which fall down, and cause pain. Before which there was a Heavines in the Head, from the Matter heaped up, and other accidents. Also excrementitious blood sent to the Brain, comes from the weakness of the first or second Concoction, or from its Crudity, and the rather if the Brain be weak. Hence it is that though good blood be bred in the first Concoction, yet because it cannot be assimilated, or brought into substance in the third, there are many Excrements, and more when it is not at first well concocted, or mixed with Excrements. This cause of the weakness of the Brain, is either from the Parents, or from age and Disease, especially from Wine and Venery, the one stupefying, and the other spending the Spirits, and both weakning the Nerves and Brain, and taking away strength: Of the excess of which the Gout is the punishment. The plenty of this humor in the brain causeth it to flow down, or external cold wind, or moistness that pierceth the Brain, and straineth and squeeseth it, or heat of the Sun or Baths causeth Defluxions, rather by opening the passages, and stirring up the Faculty to expel, then by melting the Flegm, as they call it. Also great motion that shakes the Head, by Neesing, Coughing, or the like, causeth the abounding Humor to flow down.

And we have shewed that the same humor may be without the Skull, and flow down, and cause pain, before which was Head-ach, or Heavines, and Swelling of the skin. And also we shewed the Cause why Humors are easily gathered there. And the same Causes that made the Humor flow which was internal, may move the external, as cold and heat; and sooner, as we ordinarily may perceive.

The Defluxion of this Humor, which is both within and without the Skull, is divers. For if that flow, which is in the Skull, it causeth Diseases in the Habit of the Body, and others also, as it falls into the bottom of the skull into the three cavities. For if it fall into the upper chamber next the Forehead, then it is strained through the holes of the straining Bone, and comes like clear water out of the Nose, and is called *Coriza*. If it fall into the middle Cell or Chamber, which goeth to the Pallate with many holes, it either passeth thin presently, or continueth, and turneth thick into Snot, and so is blown out at the Nose, or hawked out. Or if it flow towards the Eyes, it is turned to Tears: as we shall shew in things sent forth. But if it follow the passage of the Nerves, in the middle cell, or fall into the hinder Cavity of the Skull, which is lower and larger, through the great hole behind, which contains the the narrow, from whence come the pain of Nerves, it fals into the Habit of the Body, into fleshy parts or Joynts, and causeth the Gout. Also when the Humor gathered without the Skull, flows down under the skin, it causeth pains according to the parts, as we shall shew.

If it flow upon the fleshy parts, either inwardly or outwardly, then it gets between the Muscles and nervous Membranes, or between the Flesh and Skin, and Glandles, and causeth Heavines, when it is much, or stretching, or pricking, when it is of evil Quality, or a Tumor occult or manifest, like an Oedema, and if the pain be great, and cause a Flux of Blood, it causeth Inflammation, which somtimes is known by heat and beating pain. And if it be outward, there is apparent Tumor and Redness. These pains from Defluxions are usually in the Back and Neck, and Face, and Breast somtimes, and Joynts, as we shewed. And when these parts have been used to Defluxions, they are weaker and looser, and more apt to receive them.

If this Humor from within the Skull, flows by the ways of the Nerves into the Joynts, or from without under the skin, as *Fernelius* saith it may, then as it is about the Lips, Shoulders, Knees, Arms, Feet, or Finger-joynts, Back, or Cheeks, in one or more places, it causeth divers kinds of Gouts. In which they suppose the Joynt to be the part affected, and some think the inward part chiefly, because the pain is felt there, or increased by motion. But in regard the moving Joynt is compounded inwardly, of two Bones, which have no Periostium in that part, but only a hard Gristle, and there is no Nerve there, and therefore they are all insensible, the pain cannot be within. Nor in the Joynt of the Thigh, where there is an insensible Ligament. Moreover in regard the Bones are so exactly joyned in the Joynts, that there is no space between, and outwardly are closed with Ligaments, so that nothing can get in, how can any humor get in to breed the Gout, when there is no passage nor Vein. Moreover the Ligaments without that bind the Joynt, are insensible, or if they have any feeling, it is from the Periostium to which they grow, and that is very little. How then can there be so great pain in the Gout, if it be there? Neither can it be from the Tendons, which have little or no feeling. Besides, the Tumor without, which is at a distance from the Joynt, and the pain which is remote, shews that the pain is not in the Joynt. Also the chalky Matter, and the Nodes in the Gout, are not alwayes found in the Joynts, but in the parts adjacent. And though they grow in the Joynt somtimes, yet is not the pain therefore in the Joynts, or in the insensible parts whereof they are made. For they are from

from other Cauſes, and cannot cauſe pain, except it be by hurting the part adjacent, nor other inconvenience, but Deformity and Hindrance of Motion. For no pain can be but from a ſenſible part, which is not in the Joynts. Therefore the Gout-pain is not from the Joynts, but the parts adjacent, as the Nerves, Muſcles, and Membranes. And the reaſon why the pain is ſo near the Joynt, is the meeting of the Nerves there about, where they are comprehended in a little room, and bound about with Membranes, and Ligaments, and folded together to move the Joynt, when in other places they are free, and go ſtraight along the Body. Hence it is that when any matter falls into theſe narrow and crooked places, it eaſily ſtays there, and afflicts the Nerves cauſing pain. Which pain, if there be a Humor, is fixed in the ſtrait paſſages, through which the Nerves run; as in the Sciatica, where the pain is above the Joynt, almoſt in the Loins, where the fourth Nerve goes to the Leg, and is bent outwardly, from the Cavity of the Hip, while the Humor fixeth, and when it removeth, the pain removeth to the Knee, to which the Nerve goes, or to the Foot; the pain is the ſame in the Shoulder. And when the Matter is much the pain is in divers parts, where it is fixed, and in thoſe narrow paſſages, where the Nerves paſs through the holes of the Bone, as in the Back-bone, where it eaſily ſtayes, and cauſeth pain, and chiefly where the net work of the Nerves goes from the Neck to the Arms, and from the Loins to the Thighs.

The Diſeaſe that cauſeth this pain, is either ſtretching from much Humor, ſuch as when it falls in a fleſhy part, differing only in that the humor in this flows to the Muſcles next the Joynts, and cauſeth not ſo great pain, as when the Nerves are afflicted, and there is an Oedema in in the part. And if the humor be evil and infect the Nerves, the pain will be worſe, and heat and redneſs will come from the Flux of Blood, and laſtly a Swelling: as we ſhall ſhew in the Gout, from a Flux of Blood. All theſe ceaſe when the Excrements are conſumed, and return upon a new Defluxion. And after many Defluxions, ſome reliquies remain not diſcuſſed, which if they be glutinous, turn by degrees into Chalk. And if they are earthy, as ſerous humors uſe to be, as I ſhewed in the Stone, they turn to Stones. This is chiefly in the Hands, and Feet-Joynts, becauſe the humor can fall no further.

The Diſpoſition of the part receiving, is a cauſe alſo why the humor goes hither or thither, as when the paſſages of the Nerves, and the places about the Joynts, are too looſe. Or when there is hæreditary Weakneſs in the Nerves or Brain, or when there hath been a Diſeaſe, or is a Defluxion conſtantly ſtretching the paſſages. Hence it is that the humor, though it be not in great plenty in theſe paſſages ſo ſtretched, and made looſe, as it is uſually, when it cauſeth pain, yet it eaſily goes thither. And becauſe it uſeth to go to the extremities by its thinneſs and the openneſs of the paſſages, rather then ſtop by the way; and not only looſen the place, but ſeparate the parts one from another. Hence it is that the Podagra, or Foot-gout, and Chiragra, or Hand-gout, are more uſual then the other Gouts. And why after once, they come again monthy and yearly, and cannot be quite driven away. And the Sciatica, and other Gouts above, though the Matter ſtop in them, yet it is more ſeldom, becauſe the matter deſcends, and the pain will not be ſo looſned as in the Hands and Feet, except there be a continual Defluxion. And a general Arthritis or running Gout, is not ſo uſual as the other kinds, becauſe the humor that cauſeth it, muſt be a great quantity, to go into almoſt all the Joynts. And becauſe the ſeldom coming thereof weakens the parts but little, and alſo becauſe (as I ſhall ſhew) it comes often from another Cauſe then a Defluxion from the Head.

When Blood in the Veins falls about the Joynts, it begets a hot Gout, with a Feaver, and Inflammation, and the like: as it doth Diſtention and Heat in any other part.

This is from the abundance of it, or when it is too hot, and cauſeth a Synoch Feaver, which uſually preſently follows the hot Gout, and attends it. And as an Eryſipelas comes in a Synoch Feaver, from the Blood ſent to the skin, ſo doth the Gout from the ſame ſent to the Joynts, and they who are ſubject to the Gout, are ſubject to a Synoch, with Eryſipelas. And the Patient hopes ſomtimes it will be but an Eryſipelas, when he is ſubject to have both. Alſo the Blood being made more impure and thin by excrementitious Whey, may cauſe an Arthritis, with a ſmaller Feaver. And when the Gout is more general in many parts, and comes oftner, it is from Blood, which eaſily goeth through the Body, and not from a Defluxion from the Head, which is ſeldom the cauſe, but when it is in great quantity. Although a particular Gout, as the Feet and Hip, may be often from blood, with a Feaver. In theſe Gouts from blood, if it be very hot, and inflame the Nerves, the pain and burning is greater, with redneſs and tumor, (except it lye low, as in Sciatica) and with an eryſipelated Phelgmon. But if the blood be wateriſh, the tumor will be ſpread like an Oedema, and the pain leſs, and not very troubleſom, but becauſe it is in divers parts.

The cauſe of the heat and foulneſs of the Blood is mentioned in Synochs, as the uſe of ſtronge wine exceſſively which weakens the brain by aſtoniſhment, and makes the blood increaſe, grow hot and thin, which is eaſily therefore inflamed, to produce a Feaver, by which a part of it is ſent to the Joynts. This is the cauſe and puniſhment of the Gout. Hence it is the rich mans Diſeaſe, who uſeth exceſs in wine, and ſpiced meats, that inflame the blood. And ſomtimes the poor mans from other cauſes, as is the Feaver with Eryſipelas. It comes to all by the Diſpoſition of the Part through weakneſs, and by looſneſs of the paſſages; as we ſhewed in Arthritis from Defluxion, eſpecially if the Flux hath been often, which cauſeth greater weakneſs.

Alſo Blood ſent to other parts that are fleſhy in Synochs, as into the Emunctuaries of the Kernels there, may cauſe pain, with a Tumor and Feaver: as we ſhewed in Feavers. Or diſturb by its plenty and thinneſs, when it goes to any part of its own accord, or by labor or pain.

An evil quality cauſeth the French Pox.

An occult malignant Quality, as appears by the effect, being external, cauſeth the pain about the Bones, which is called the fourth ſort of French Pox. This Quality comes from the Body of another infected, whether totally or in part: Therefore Whores infected, though they walk abroad, and have not great accidents, may infect others. And ſomtimes a Whore takes it, and gives it to the next Cuſtomer, and clears her ſelf. This Quality infecteth by touch, eſpecially of the naked tender Privities in Copulation, and ſo it paſſeth from one Inſtrument of Generation to another, and ſo to the whole Body. Hence it is that it came from the *Indies* to us. And it may come by infected Excrements other wayes, as Sweat in Hankerchers or Shirts, or from Spittle, even as the poyſon of venemous Breaſts is communicated by biting; therefore beware of Spoons and Cups, wherein they drink, and Kiſſes by which Nurſes infect Children. For in my Fathers time in our honeſt Family, my Mother was infected with her Child that ſhe gave ſuck to, by that means, through a Harlot that was infected, and her ſervant. And my Father with the help of a Chyrurgion, cured them both by ordinary means. It may come alſo from the touching of mattery Clouts. And a Midwife of ſixty years old in *Paris*, delivering a woman that had a venereal Ulcer, had an Ulcer in her Hand, by which means ſhe infected many honeſt Women, when ſhe touched their Privities, as *Leviſa Burgeſia*, the famous Midwife to the Queen of *France*, recorded in her Book. Few Bodies are thus infected, but Infants and very tender People often touched. Nor can it come by breath, for then more would be infected; although many to ſmoother their unlawful Lechery, pretend it.

This Quality is in a Vapor or Humor, and goes from the Body to Body, and infects the Part it first toucheth, and seldom stayes there, but goes like poyson through the body, especially into the membranous parts; and if it be outwards, it is like an Elephantiasis, and causeth loss of Hair, Pustles, and Ulcers: As that shall be shewed in diseases of the Skin from the Pox. If it be deep in the solid parts, then it gets into the Periostium and Membranes, and causeth pain about the Bones, especially when there is no Flesh, and where many Membranes and Nerves meet in the Heart, Breast, Skins, and the like. These pains are increased with heat, and produce Nodes, after the Periostium is eaten away; as we shewed in Cephalæa, from congestion of humors. And few other inconveniences, but no great change in the Spirits and Humors, nor doth any thing appear of that Nature in the Urin, Excrements, and Hurt of the Functions, except accidents do arise from great pain, and long continuance, or violent medicines, which we must rather study to cure then the Pox.

An evil malignant quality causeth external malignant Head ach.

There is also inwardly a secret Maligність, which being an enemy to some parts, causeth pain in the Habit of the Body, like this, such as we shewed might come from the Pox, taken from without, or a Head-ach external without the Pox, when besides the distemper causeth pain, there is also Malignity, by which it lasteth longer. And some

A malignant Quality causeth a malignat gout.

pains of the Joynts that come from Defluxion, when the Humor is malignant, may produce somthing malignant, and unknown, formerly in divers Diseases, which is often and lasting, and hath its proper accidents, and can scarce be cured. And we may very well conceive that the pain in the Cramp,

A malignant quality is the cause of the running pain in the Cramp.

which runeth through the Body, comes from a perverse quality that is offensive to the Nerves, by the wonderful and strange accidents it produceth for a long time, by the Nerves, through the whole Body, to the extremity of them, where the pain is

A malignant quality is the cause of pain in depraved Touching.

greatest. And those Diseases which are called Colds and Heats, come from Maligність, as appears by their prodigious Symptoms.

The Cure.

The Cure of pains in the Habit of the Body, when other accidents are greater.

When accidents are joyned with pains in the Habit of the Body, and are greater we shewed the Cure thereof to be in the accidents that are most urgent. As when pain comes from Distention, and from too much motion, it becomes a stretching pain with Lazinesse, or a violent with the Cramp: The Cure of one is shewed in the Cramp, and of the other in Lazinesse. And if the pain increase from too much motion, and a Flux of blood be joyned, you must use the same Cure. And if the pain be chiefly in the Back from inward Diseases, it must be cured as the Symptom of these Diseases. If Wind cause stretching pain, cure it as Spasmus, or Cramp, or Palpitation. If the Members are weary, and broken by long lying and Compression, restore them as in Lazinesse. If any part is pained from Compression, the cause being taken away, it ceaseth, except Inflammation follow, which requires a Cure by it self. If pain come from broken or dislocated Bones appointed for motion that press the parts: The Cure is shewed in Immobility. If it be in other Fractures, that cause no loss of motion, because other internal and external accidents follow with Tumors, cure it as in Tumors. If pain come from a Rupture, see Ruptures and Tumors from thence. If there be evil Feeling from a hot or cold Distemper external upon the part, see the Diseases of the Skin. If from Feavers, see Feavers. If external Head-ach come from Humors, see Head-ach. If in a Palsie there be pain from a malignant Defluxion, see the Palsie.

The Cure of Head-ach from Humors.

The Cure of Pains in the Habit of the Body which are greater then the accidents.

We shall distinguish the Cause of Pains in the Habit of the Body, which are greater then their accidents; as the three kinds, either such as are about the Joynts, or Flesh, or Bones, and cure them in respect of their Causes. But if the pain be from Flux of Blood, or Water called the pains of the Joynts: We shall cure it the same way. As if it be arthritis from the congestion of Humors, because it come from a Defluxion first. And the same way of cure shall shew how a heavinesse of the Head from congestion of Humors, that goes before an Arthritis and Defluxion may be cured, and they prevented. And if pain like that from Defluxion, come of wind, because the same things that dissolve a flowing Humor expel wind: We shall use the same way to cure and prevent the breeding thereof. But pains from a malignant quality, will have a particular Cure, as from the Pox, and the like, of which, when we have spoken of the Cure of Defluxions and Joynts.

The Cure of Arthritis from Congestion of Humors.

The Cure of external heavinesse of the Head from congestion of humors.

The Cure of Pain in the Habit of the Body from wind.

Prognosticks in Defluxions in general, and in the Gout.

Defluxions that fall generally into the Habit of the Body, though they are usual, and upon divers parts, molesting more or less, and comming from light Causes and returning, except they fall upon the inward parts, especially the Midriff, are not so dangerous, and are easier cured then the Joynts. And pain from wind, is more easie to be cured. All Joynt-pains are perverse and last long, and easily return. Among which, though the general Gout be the greatest pain, and somtimes dangerous, with other accidents, yet because the cause must be great, that must send it to so many places, it is not so usual, and it comes slower, and seldomer then the rest, and somtimes never returns. Podagra and Chiragra are most usual, and return monthly or yearly, and are hard to be cured when fixed, but kill not but by other accidents, for many have lived long with the Gout, and others by the Gout have been freed from greater Diseases, which the Defluxion using to fall before, upon more noble parts would have caused. The Sciatica and Shoulder-gout, are less usual then the Podagra, and more then the Arthritis, they return seldomer then the Podagra, and sooner then Arthritis, and somtimes are away some years, and return again, and last as long as an Arthritis, for some months, but with less danger. These things observed, we must make our Prædictions accordingly, especially in the Podagra fixed or hæreditary, and not promise rashly to cure. But we must try if we can make it less, or come seldomer, and bring it to pass if possible, and comfort the Patient that age abateth the pain.

The preventing and curing of Defluxions, and Arthritis, and its Kinds.

The Method of curing in Defluxions, and Joynt-pains, is to prevent, and take away the pain: We must prevent so that they may return less and seldomer. By hindering the increase of blood or water in the Head, or the whole Body, by Diet and Evacuations, and Correctors of Distemper and Weakness. We divert the Flux from the Joynts and other parts, with things that stop, or by derivation of the Humor. And we confirm and strengthen the parts, to which they use to flow, when they are loose and weak, that they may not receive the humors, and amend the distemper.

After

After the Defluxion is fallen, and in the time of pain, we cure by ſtopping at the Fountain, or ſtraitning the paſſages, through which the Humor flows, and by Revulſion from the part, and Derivation and Repercuſſion, and we allay the pain, and prevent a new Defluxion, proceeding by degrees, eſpecially after the Humor is fallen down to things that digeſt it, if it be Blood, and diſcuſs, as in other Inflammations. If it be another Humor, let the means be ſtronger, and if it lye deep, more attractive, and conſuming or opening. And in the Declination, we ſtrengthen the part, and conſume the reſidue. Theſe are done divers wayes, as the Defluxion is upon the Joynts, and Members, or Back, Breaſt, or Neck, or Face (of which in Tooth-ach) or as it is a general Arthritis, or a Podagra, Chiragra, Gonagra, Sciatica, or Shoulder-gout, called Pain of the Homoplate, by Diet, or Medicine, by Evacuations, by Stool, Vomit, Spitting, Sweating, Piſſing, Cutting, Burning: Alſo by Alterers inwardly taken, and outwardly applied, as follows.

A Diet to cure the Arthritis, and Defluxions.

The Diet muſt be to prevent Excrements and Humors, or keep them from flowing. Let the Air be temperate and dry, for cold, windy, cloudy, and moiſt Weather and hot, provokes Defluxions, and the more when it ſuddenly alters from cold to hot. Let not the Patient waſh his Hands or Feet in Water, for it is hurtful, whether cold or hot. And Wine is better, as we ſhall ſhew in ſtrengthning the Joynts. Let the Diet be convenient in quantity and quality, with Exerciſe, Sleep, and other Motions of Mind and Body: As we ſhewed at large in Weakneſs of the Stomach, to prevent Excrements. If it comes from Blood, we muſt diet as in Feavers, eſpecially in Gouts, that eaſily return, as the Podagra, and good order of Diet-wine, and Women wil prevent, or abate the Gout: As when there is a ſimple exquiſite Diet, only eating once a day, abſtaining from wine, or drinking it ſparingly, or with water. Inſtead whereof they may have Drinks made fit, or Meath. As for Venery, they muſt either give it over, or uſe it ſeldom, and not ſtanding. And this may be the reaſon why *Hippocrates* ſaith that Women have not the Gout, before they have uſed Venery, and Eunuchs ſeldom have the Gout.

When the pain is begun, let the Diet be thin, and let them faſt as much as they can; and uſe Medicines proper in their Diet, according to the accidents. In the Arthritis forbid wine. And if they be hot or feaveriſh, give ſteeled water, Juleps, and ſharp Syrups, if the Defluxion be in its Courſe. If they be not hot, give the Decoction of Coriander, with Syrups, or Hydromel, and rub the whole parts, and the oppoſite to derive the Humor inſtead of Exerciſe.

The Cure of prevention of Defluxions, and arthritis by Evacuations.

To prevent Defluxions and Joynt-pains, open the Belly, and purge Spring and Fall, and at other times, if the Body be foul, as the Humor is wateriſh, which requires ſtronger means, or bloody, which requires leſs, with Præparatives if need be: as we ſhewed. If a Podagra comes from Blood, we ſhewed the cure in a Synoch, with Eryſipelas. If Defluxions and Arthritis come from water, there are Purges mentioned in Diſeaſes of the Brain and Nerves. If the Humor now flow, they muſt be uſed warily, leaſt the Defluxion increaſe thereby, chiefly in the Joynt-pains, not only from Blood, in which it is enough to keep the Belly open, but if from other Defluxions, becauſe they are thin, and eaſily ſtirr'd, uſe gentle Purgers, with Binders, and divert the Matter rather then move it with ſtrong Medicines. This muſt be obſerved at the beginning, in the Cure of Arthritis, in the Pains of the Joynts, it is beſt to avoid ſtrong Purging, not only for the reaſons ſhewed, but to hinder pain by violent motion, uſe Laxatives firſt and after ſtrong Purgers.

Thus, give Clyſters to prevent and cure, for they open the Belly, and draw from the Joynts and other parts. Eſpecially in the Sciatica, and pain of the Back and Loyns, from Defluxions, becauſe they come near to the parts affected, and abate the pain, and if they be ſtrong, draw the Humor away: Let them be ſuch as were mentioned in the like caſe.

Or if the pain come from blood, make a cooling and pricking Clyſter of the Decoction of Polypody, Mallows, Marſh-mallows, Violets, Beets, Mercury, Bran, and cold Seeds, with Sugar, Honey, Oyl, Butter, Caſſia, Yolks of Eggs, and the like.

In other caſes of Defluxions and Arthritis, eſpecially in the Hip and Parts adjacent, uſe this common looſning, pricking, and anodyne Clyſter. Take *Althea roots two ounces, Orris an ounce, Mallows, Blites, Beets, Coleworts, Mercury, Betony, Calaminta, Penny-royal, each a handful; Chamomil, Melilot, Dill, Stœchas, and Lavender flowers, each a pugil; Fænugreek, and Lineſeed, each half an ounce; Caraway ſeeds, and Rue, each a dram; Bran a pugil*, boyl and ſtrain, add *Honey two ounces, red Sugar an ounce, Turpentine*, diſſolved with *the Yolk of an Eg, a dram and an half, Hiera, Catholicon, or Electuary Indi half an ounce, Oyl of Lillies, and Chamomil, each an ounce and half; Sal Gem half a dram*: make a Clyſter.

Another that heats and diſcuſſeth. Take *Orris roots an ounce, Calamus, Elicampane, each half an ounce; Hedg-muſtard, Groundpine, Calaminta, or Balm, Time, Marjoram, Betony, each three handfuls; Flowers of St. Johns-wort, Stœchas, Lavender, and Roſemary, each a pugil; Bay-berries half an ounce, Cummin, and Seſely ſeed, each two drams*; boyl them *in Wine, and Water*, add *Honey of Roſemary an ounce and an half, Juyce of Rue an ounce, Sack two ounces, Benedicta Laxativa an ounce, Caſtor a ſcruple, Oyl of Rue three ounces*, with a little *Salt* make a Clyſter, if you add *half a dram of Oyl of Spike*, or a little *Oyl of Time, Roſemary, Calaminta*, it will be ſtronger.

In the pain about the Loyns, give Oyl of Rue alone.

A ſharp diverting and purging Clyſter. Take *Briony-roots, and Hermodactils, each ſix drams, Agarick, Aſarum, each two drams; Hedg-muſtard, Penny-royal, Wormwood, each a handful; Tops of Centaury a pugil, Rue, and Hedg-muſtard ſeed, each two drams*; boyl, ſtrain, and add *Honey an ounce and an half, Urin of a Boy two ounces, Hiera Logadij, Ruſi, or Colocynthidas three drams, Juyce of Water-creſſes an ounce, Oyl of bitter Almonds three ounces*, with a little *Salt* make a Clyſter. If you add *a dram of Coloquintida*, it will be better.

Alſo Decoctions mixed with the Pickle of Fiſhes, and urin alone, makes good Clyſters. Some add Chymical Oyls

And others give Sory in Wine, which corrodes, and the Pickle of the Fiſh Silurus.

Suppoſitories alſo that are ſharp, ſtir up Nature, and derive from the part. As, Take *boyled Honey*, and add *a dram of Hiera, Eſula half a dram, Sal Gem. a ſcruple*, with *Mouſe dung* make a Suppoſitory.

All theſe Purges compoſed againſt the Gout and other Defluxions; if it come from Blood, give gentle things, as Syrup of Roſes, Caſſia, Manna, Catholicon, Diaprunis, Tryphera Perſica, and Broath of an old Cock, *Dioſcorides*.

Or this: Take *Rhubarb four ſcruples, Spike half a ſcruple*, infuſe them in *water of Iva*, or the like, ſtrain, and diſſolve ſome of the forementioned therein. Or if you will have it ſtronger, *two drams of Electuary of Juyce of Roſes*.

To cleanſe the Blood. Take *Hops and Fumitory, each a handful; Cordial Flowers a pugil, Sebeſtens ſix pair, Tamarinds half an ounce, Liquoriſh three drams, Polypody half an ounce, Thyme, and Epithymum, each a dram; Senna two drams*, boyl, ſtrain, and infuſe therein *Rhubarb a dram, Spike a ſcruple, Citrine Myrobalans a dram and half*, ſtrain them ad *Syrup of Roſes an ounce, or half an ounce of Catholicon, or Tryphera*: make a Potion.

Or

Or this Decoction. Take *the Broath of an old Cock, Capon, or Veal,* boyl therein *Bark of Lignum vitæ, or the Wood two ounces,* and infuse in the *hot strained Liquor, Senna two ounces,* let it cool by degrees twenty four hours, add *Syrup of Roses four ounces.* Give it four mornings, with a little *Cinnamon-water,* this draws Water from the part. And some add *an ounce of the Water of Bears Ear* to every Dose.

Or this Syrup. Take *Myrobalans, Chebs, yellow and indy, each an ounce; Polypody an ounce and half, Raisons stoned twenty pair, Cordial Flowers two drams, Spike half a dram,* infuse them in *Wormwood-water,* boyl, and strain, and add *Juyce of Roses six ounces, Manna four ounces, Sugar two ounces,* give *three ounces* at a time.

If it come from a wheyish Humor, give Hiera, Alephangina, Assaieret, or Pills of Rhubarb and Agarick.

An Electuary: Take *Cathelicon an ounce and half, Senna six drams, Tartar half an ounce, Anise-seed two drams, Rue seed half a dram, Roots of five leaved Grass a dram, Ginger half a dram, Cinnamon a dram,* with *Syrup of Roses* make an Electuary: Give a bolus every week.

A Potion: Take *Chips of Guaicum half a pound, Roots of Dwarfe-elder, Elicampane, Hermodacts, each half an ounce; Senna four ounces, Agarick half an ounce, Ginger half a dram,* with *Honey, Wine, and Water,* make a Decoction for six doses, every other third day, or twice a week.

A Potion: Take *Agarick two drams, Rhubarb a dram and half, Myrobalans, Chebs, and Citrins, each half a dram; Aloes a dram, Roots of five leaved Grass, of Birthwort, Spike, Mastick, Myrrh, Amber, Cubebs, Ginger, each a scruple;* with *Turpentine* make Pills: Give *half a dram* twice or thrice in a week, add Diagredium, if you will have it stronger.

Or these: Take *Rhubarb, Agarick, each half an ounce; Myrobalans, Chebs, and Citrine, each a dram; Aloes two drams, Sarcocol, Bdellium, Sagapenum, each half a dram; Roots of Birthwort, Valerian, Meum, Gentian, Herb Iva, Germander, Tops of Centaury, St. Johns-wort, Parsley seed, each a scruple; Spike, Zedoary, Ginger, Mace, Sal Gem. each half a scruple;* with *Syrup of Coleworts* make a Mass.

Pills of Hermodacts good in the Joynts, may be used to prevent. The Arabians make them of Hermodacts, Cummin, and Ginger, with Honey; the Greeks add Carthamus seeds, Euphorbium, Myrrh, Mastick, Anise, Pepper. The strongest are these called the lesser, made of Scammony, Hermodacts, Myrobalans, Aloes, and Roses, and are good in a hot Cause. Those called the greater, work strongest, and are best in a cold Cause, made of Hermodacts, Coloquintida, Turbith, Myrobalans, Aloes, Bdellium, Sagapenum, Opopanax, Sarcocol, Euphorbium, Castor, Rue seed, Agrimony, Smallage, and Saffron, with Juyce of Coleworts. Arthritical or Joynt-pills, are made of Hermodacts, Turbith, Agarick, Scammony, Aloes, Sal Gem. with Spices, Gums, and Seeds that break the Stone.

☞ Or make Pills of Hermodacts, choosing alwayes the white, smooth, and easie to be beaten, that have a white Pouder, take heed of the Colchick poyson, whose heads are wrinkled, and are black within, and without, or dark red. Thus, Take *true Hermodacts half an ounce, Aloes, Turbith, Agarick, each a dram and half; Rhubarb, Myrobalans, Citrine, and Chebs, each a dram; Mastick two scruples, Euphorbium a scruple, Ginger, and Cummin seeds, each half a dram; Saffron half a scruple,* with *Honey, or Syrup of Roses* make a Mass, give *a dram,* add if you will make them stronger, *Diagredium a dram, or Troches of Alhandal two scruples,* and to *two scruples,* add *a scruple of Rhubarb,* and with the *Juyce of Iva, Coleworts, or Roses* make Pills.

Or thus: Take *Aloes six drams, Citrine Myrobalans a dram and half, Turbith, Hermodacts, each half a dram; Rhubarb a dram, Sal Gem. Ginger, each half a scruple; Diagredium, Troches, of Alhandal, each three scruples and an half;* with *Syrup of Roses* make Pills.

In Defluxions for to purge strongly, give an Electuary of Citrons, Juyce of Roses, Elescoph (Amoron of the French King, is commended in the Sciatica) and fine quibus Pills, of Myrobalans, and Aggregative. We use also things to purge Flegm from the Head and Nerves, as Diaphænicon, Diacarthamum, Indy majus, Pills of Cochiæ Aureæ, Fœtidæ, and of Sagapenum.

An Electuary commended by *Galen,* and others to take away pain of the Joynts presently. Take *Hermodacts, and Diagredium, each two drams; Ginger, Cloves, Cummin, and bitter Costus, each an ounce,* with *Honey boyled in white Wine three ounces,* make an Electuary, give *two or four drams in a Wafer dips in Wine,* or drink it in *Wine.*

Or this: Take *Hermodacts, and Turbith, each two drams and an half; Agarick a dram, Aloes, Scammony, each two drams; Lilly roots, and Squills roasted each a dram and half, Tops of Centaury six drams, Olibanum, Galbanum, Ammoniacum, each a dram; Mastick a dram, Anise, Fennel, Parsley seed, each three drams; Cloves six drams, Cinnamon half an ounce, Cubebs, Spike, each two drams; Carpobalsom, and Wood-balsom, each a dram; three Peppers, each half a dram; Saffron a scruple, Castor half a scruple,* make a Pouder, and with *Honey* an Electuary, give it as the other.

Or the Electuary of Zeno.

Tablets for the same. Take *Hermodacts two drams, Turbith a dram and an half, Diagredium a dram, Rhubarb two drams, Spike a dram, Calamus, Cubebs, long Pepper, each half a dram; Sugar four ounces,* dissolved in *Rose-water,* make Lozenges, give *two drams.*

Or thus: Take *Turbith, and Rhubarb, each two drams; Carthamus seeds three drams, Diagredium a dram, Cinnamon, yellow Sanders, and red Roses, each a dram;* with *two ounces of Sugar* dissolved in *Rose-water,* make Tablets.

Much may be done by Vomit to prevent, because it cleanseth and deriveth, if they who are used to it, vomit once or twice in a month, or more two days together, especially presently after Meat, which if it were fat, and strong, and much, and the Belly rubbed, the Vomiting will be easier. In all Defluxions, and kinds of Gouts, Vomits, and Clysters, are better then Purges to divert. And in the Sciatica, it is good to vomit two or three days together.

Asarum and Broom are chiefly commended for Vomits in the Gout; as the Decoction of the Seeds or Roots of Asarum boyled in Water or Whey, or the Decoction of Broom flowers, and the Seeds of Ricinus in Broath.

Also the Decoction of Raddish seed, Atriplex, Dill, Water-cresses, Rocket, Dwarfe-elder, in the broath of an old Cock, with Oyl of Olive, of Chamomil, or Oxymel, or Honey, and Water, and the like.

By much Spitting we draw Flegm from the Head, as the Fountain to prevent Defluxions, especially when by the heavinesse of the Head, we suppose the Humor is gathered there; and when Nature doth not purge that way, we help her with Masticatories and Errhines.

Also Sweating is good to prevent serous humors, breeding the Gout, and they cannot be better sent from the whol Habit of the Body. And because the blood is thereby purged from water, it is good when the Gout comes from blood, to make it thicker.

They are continued a long time for four or five weeks, by a sweating Potion, in the Morning, and before Supper, made of the Decoction of Guaicum, Sarsa, or China, with Water of Iva arthritica, with a sparing Diet, with the Decoction of the same for Drink. And you may make Wine of the same; as we shewed in the French Pox. Also use Baths for a month, this will strengthen the Joynts.

Also it is good once a week, after Purging to sweat, to take away the Defluxion, by a dry bath, morning, and before supper, or in bed, with Treacle, Mithridate, or Rob of Elder a dram, Syrup of St. Ambrose six drams. And with the Decoction of Rupture-wort. Or half an ounce of Dwarfe-elder roots, or four scruples of the Seeds infused a night in white Wine, is good in the Gout.

Also you may sweat by Fumes.

It is not amiss to discuss the Matter, by sweating; as I at large shewed in impotent Motion. ; In a Tub that hath had strong Water, and Juniper burnt in it, or in a Cradle made on purpose, with an Alembick under it with proper things.

Also after Purging it is good to sweat, especially if Nature move that way, when the Defluxion is but in the beginning of an Arthitis force it not, least the Humor being thin, flow the faster ; but if Nature tend that way, give some gentle Helpers mentioned.

By pissing plentifully, the serous humors are carried from the Veins and whole Body, and it is good to prevent Gouts. And somtimes we provoke Urin in the Fit to derive, with the Decoction of Pease, opening Roots, Asparagus, Melon seeds, and the like in the morning.

The preventing and curing of defluxions, & Gouts by cutting and burning.

We prevent Defluxions and Gouts, by opening a Vein in full and foul bodies, in Spring and Fall, especially when the Gout is from blood. And *Galen* saith that he prevented the Gout by purging, and bleeding, and temperate Diet. Open the Arm-vein for general Evacuation ; or that in the Foot, for particular, which is good in Women, when the Terms are stopt. And it is acknowledged a singular Remedy to prevent the Podagra to let blood twice a year in the Foot. And it deriveth and preventeth, if it be done in the sound Foot. And some open the Vein in the Loyns by the Buttocks, to prevent the Sciatica.

For Cure of Defluxions and Gouts from Blood, it is good to bleed at first, for Revulsion in the part distant, as in the arm or hand, to draw from the feet, or to derive by the part, near where it is found. In the Sciatica from blood, open a vein in the arm to revel ; *Hippocrates* openeth them behind the Ears ; and the Arabians opened the Veins by the little Finger. This done, open the Vein in the Ham or Ankle within, to derive, or without, if it appear most, which is called the *Sciatica-vein*, for its great benefit : This alone cures somtimes. This is done on the same side the Sciatica is, although we have known by experience, that bleeding on the sound side hath cured. This bleeding in the Foot is good when the pain is not from blood, but then bleed not in the arm before. Otherwise you must not bleed rashly in particular Gouts from water, least you move the humors, except from the great pain, you fear a new Flux of blood, and then you may do it for Revulsion.

We use also Cupping and Scarification to prevent. of what cause soever it come, in the inside of the Leggs or Ankles : It is good in Podagra and Sciatica. It is chiefly good every new Moon, to scarifie in the sole of the foot, under the great Toe, to prevent a Podagra. And in the beginning of Defluxions and Joynt-pains ; it is good for turning the Matter another way, in the opposite sound part, as in the Sciatica in the Buttocks and Leggs, and in the Shoulder-pain in the Scapulæ. And to bleed by Leeches, in the Hæmorrhoids especially, where there hath been a custom.

Some teach that they can stop the Flux to the part, by opening and tying the Vein. And some have drawn yellow Water from the Hands and Feet, by cutting, which *Hippocrates* alloweth. But when no certain Matter appears, the way is doubtful and dangerous. And a light Incision is good when the Nodes or Knots strive to get out, and the skin is there.

Also the Flux of Humors is diverted by burning and blistering, this is the best to prevent, and to cure by drawing forth the matter ; and is to be used chiefly when the matter lyeth deep, and will not be discussed by Medicines, as in the Sciatica, and Shoulder-gout, or other kind, or defluxion upon the Members, when the Cause of the Disease sticks stoutly : This is the last Remedy to take it out.

The gentlest way is to apply things that make the skin red, only in the Hip, Shoulder, and other fleshy parts, upon the pain. As Sinapisms made of Mustard seed, and Vinegar one part, and Figgs, or Leaven two or three parts, with Pigeons dung.

Stronger things blister and burn, called *Vesicatories* and *Cauteries*, these are applied behind the Neck to prevent, or to the arms to cure, to stop the Flux a little above the part, or when it is flown below it, as in the Joynt-pains, below in the Joynt, in the Sciatica, in the Instep, or to the Buttocks, in the Gonagra to the Ham, or upon the part.

These Vesicatories are Flamula, Crowfoot, Spargrass, Daphnoides, Capsicum, Dragons bruised, or Nettles, or Milk of Figgs, with Bran, and Vinegar.

Or apply a potential Cautery of Spanish Flies, and Leaven, and things that take away pain, mentioned in opening Imposthumes.

This is done sooner and better, with a hot Iron, and they will not feel so much pain, if you clap first a Plate of cold Iron upon the part, to be burnt, which hath a hole in it, through which the Cautery Iron may pass, for by the Goldness of it, and pressing, and stupefying of the skin, the pain is not felt.

The preventing and the Cure of the Gout, and Defluxion, by things taken in.

We give to prevent the Gout that returns so often, when it comes of blood things to cool and thicken it. Such as we shewed in Synochs, with Erysipelas, as sharp Waters and Spaws, by use whereof many have been kept free from the Gout. I knew a man that was troubled with the Gout, and lived many years after, by the use of a Drink made of Bar-berries, Prunes, Plumbs, Apples, and sour Pears, with a few Juniper-berries ; and some have been cured by drinking of ashes, Milk ; others with Vinegar, for divers dayes. *Dioscorides* commends Vinegar, and Honey ; others Vinegar of Squills.

If the pain come from a watery Defluxion, then give things to consume it, and to strengthen the brain and Nerves, by which the Gout is prevented, if constantly used. And the Podagra from blood, is so prevented by temperate things that consume the Serum, and make the blood purer and thicker, These are mentioned in a Palsie from Flegm, and Weakness of Stomach, and other Diseases from Defluxions.

Among which the Water of Groundpine, or Iva arthritica, is best, or the Decoction thereof, in Hydromel, Oinomel, or Honey, and Wine, Water, or Vinegar, called Oxymel, if often drunk ; or a syrup of the juyce of it ; or a Conserve, or a Pouder of the same ; or of Primrose, or Cowslips. Also Bettony, Sage, and Stœchas.

These following taken many weeks together, dry up Defluxions, and are excellent.

As Decoction of Althæa roots, Grass roots, Asparagus, five leaved Grass, white Thorn, Echium, Corn-poppey, and Æthiop leaves, are approved of *Dioscorides* against the Sciatica, in wine, or wine and water, with Honey and Sugar.

An Electuary. Take *Conserve of Groundpine two ounces, of Primrose, Lilly of the Valleys, Broom, and Bettony flowers each an ounce and half, Conserve of Roses an ounce, Cinnamon a dram, Cloves, Galangal, Nutmeg, each half a dram ; Ginger a scruple, Spike half a scruple, Coral a dram, Harts horn, and Ivory, each half a dram ;* with *Syrup of Bettony, or Groundpine*, make an Electuary : Give as much as a *Nutmeg*, and drink *Bettony water* upon it.

Another : Take *Seeds of St. Johns-wort, Leaves of Germander, each two ounces ; Groundpine an ounce and an half, Bettony half an ounce, round Birthwort roots an ounce and half, Sarsa an ounce, Angelica six drams, Sassaphras half an ounce, Asphodel roots*, if they can be had *two drams, Ivory, Harts horn, Amber, each a dram ; red Coral a dram and half, Cinnamon two drams, Cloves a dram, Saffron half a dram*, add to them poudered being *an ounce, two ounces of Honey*, give *four scruples or a dram.* If you would have *Pills*, mix the *Pouders with Turpentine*, and some proper *syrup*, and give *half a dram.*

Another to be used daily. Take *Sarsa four ounces, St. Johns-wort seeds, Leaves of Groundpine, and Germander, each eight ounces; round Birthwort roots six ounces, Angelica three ounces, Cinnamon two drams, Cloves four scruples, Saffron two scruples,* with *Honey* boyled in *white Wine,* make an Electuary.

Or these Pills: Take *Roots of round Birthwort, and Angelica, each two drams; Leaves of Groundpine three drams, Rupturewort a dram, Spike half a dram, Saffron a scruple, Ashes of dead mans Skuls a dram and half,* with *Turpentine, and Syrup of Bettony,* make Pills: Give *a dram.*

Sciatica pills: Take *Powder of Groundpine six drams, Gum Ammoniacum, and Opopanax, each a dram; Myrrh half a dram, Castor a scruple, Euphorbium half a scruple,* with *Turpentine* make *Pills.*

A Sciatica Electuary: Take *Groundpine, and Germander, and Ivy, each half an ounce; Rue, Sage, Mugwort, Savine, Bettony, Thyme, each a dram; Seeds of St. Johnswort, or Asyri, or Androsæmum three drams, wild Rue, and Southernwood seeds, each a dram; Madder, and Monks-Rhubarb roots, each a dram and half; Pepper, and Cardamoms, each half a dram;* make a pouder, and with a *pound of Honey* an Electuary, give *a dram.*

Or, Take *the Pouder* last mentioned *an ounce and half, Roots of Xyris, Polemonium, and white Poplar barks, each a dram and half; of Heliochrys, Avellum, Chamæcyssus,* called *Ground-Ivy, Dasy flowers, and Comfrey, each a dram; Capparis, and Ocimastrum seeds, or wild Basil, each half a dram;* with *Honey* make an Electuary: Give it as the former.

An excellent Syrup against all sorts of Gouts. Take *Sarsa two ounces, Calamus, and Roots of five leaved Grass, and Birthwort, each an ounce; Angelica half an ounce, Asarum two drams, Groundpine, Rupturewort, and Bettony, and Germander, each a handful; Sage, Thyme, Mints, Marjoram, each half a handful; Primrose, and Comfrey flowers, each a pugil; Rosemary, Stœchas, and Lavender flowers, each half a handful; Aniseseeds half an ounce, St. Johns-wort seeds two drams, Basil, Seseli, and Rue seed, each a dram;* boyl them in *Water,* and the third part *Wine,* strain, and add *Honey a pint,* make a *Syrup,* with *Cinnamon two drams, Cloves a dram:* Give *an ounce* to prevent, alone, or with *Water of Groundpine, or Bettony.*

A Pouder of ashes to dry up Water. Take *Ashes of a dead mans skull an ounce, of a Bulls pizzle, or Castor half an ounce, of Swallows, Cuckow, or Kites two drams, of Harts-horn, and burnt Ivory, each a dram; of Amber half a dram, Pearl half a scruple, Cinnamon two drams, Diagalangal and Diamoschum, each half a dram; Sugar of Roses, and Sugar Candy,* as much as all the rest: Give *a dram and half,* and drink wine with proper distilled water thereupon, or make Tablets with Sugar dissolved *in Bettony or Groundpine water.*

In the Cure, give things to stop the Humor, when it falls. If it be blood, let it be cooled and thickned, with Syrup of Violets, Water-lillies, Endive dryed, red Roses, Myrtles, Julep of Roses and Violets, with Water of Sorrel, Plantane, Lettice, Roses, and the like. Or with a Decoction of Prunes, Sebestens, Jujubes, and the things mentioned in Synochs. To stop the Humor, use things mentioned in Defluxions and Catarrhs.

Sometimes give Narcotick Opiats in both cases, they are not dangerous, for they abate pain, and stop the Flux, as Treacle and Mithridate; and if the Defluxion be waterish, ad a little Bole. Also Philonium Asyncritum, and things mentioned in Colicks that heat, if there be pain and watching.

Adding as followeth, to stop Defluxions. Take *Mastick, Frankincense, each a dram; Storax half a dram, fine Bole a dram and half, Ivory and Bedeguar, each half a dram; Spike half a dram, Saffron half a scruple, Opium five grains,* with *Syrup of Poppies* make Pills: Give two mornings and evening.

The ordinary cure of Defluxions, & Gouts and Prevention.

We apply Remedies to the head and other parts, some at first, others in the declination.

In a Defluxion or Gout, from Rhewm from the Head, after decent purging, we apply dryers and strengthners to the head out of the fit after the Defluxion, and in the fit, when we fear not the Return of the Defluxion; as we shewed in Diseases from Flegm.

As Lotions for the Head, of Sage, Marjoram, Bettony, Groundpine, Stœchas, Lavender, Rosemary, Agarick, and the like boyled in Lye of Vine ashes, with other drying things proper for the Head.

After washing, that it may not raise a Defluxion presently, dry the Head with a fumed Cloath, with Amber, Mastick, or Sandarach, and then comb it well.

Also Pouders in Caps are good, or for the Hair, made of Head-herbs, and dryers; as Nigella, Mastick.

We apply to the parts receiving the Defluxion to prevent it, things to strengthen, and to consume the residues, and to confirm the Cure.

The Hand or Foot is to be often washed with a Lye of sleeled water, and ashes of Beech, Oak, Juniper, Vine, Horse bones, and Dears bones, and the like, Rosemary, Bayes, Hermodacts.

To this Lixivium we add Wine, or Urin, or Salt, or Allum, to make it stronger, sometimes Tartar, and Brimstone.

Salt-water whether natural or artificial, doth the same thing, alone, or poured through ashes, to which Myrrh added, makes a good Fomentation.

Or the decoction of Juniper, or Salt, or of Rapes, or a Fox inbowel'd.

Or thus, when there is a loose Tumor in the declination of a Disease. Take *Roots of Dwarfe-elder a pound, Groundpine a handful, red Roses, Chamomil, and Melilot flowers, each a pugil; Pomegranate flowers, and Myrtle seeds, each a dram; Earth worms many,* boyl them in *four parts of Lixivium, two parts of Wine, and one of Water.*

Or this: Take *Dwarfe-elder roots, and Hemp two ounces, Sage, Wormwood, Bayes, Organ, Penny-royal, Calamints, Mints, Thyme, Groundpine, Bettony, Hyssop, Plantane three handfuls, Moulin, Rosemary flowers, and red Roses three pugils, Juniper and Bay-berries a pugil, Myrtle berries half an ounce, Cypress nuts an ounce, Pomegranate peels and flowers half an ounce;* make a Decoction in *Water,* and the fourth part *Wine,* add *Salt an ounce, Allum half an ounce,* wash therein to astringe more, add *Galls, Acacia, Hypocistis an ounce,* and for the poor, *Stones, Pears, Services, Medlars.*

Oyntments to strengthen the weak loose parts, are Oyl of Grape stones, with Oyl of Salt, and Oyl of Hazle-nuts, Cherries, de Been, Citrinum Oyntment, and that of Orange flowers.

A strengthening Oyntment: Take *Oyl of Myrtles two ounces, Salt two drams, Myrrh a dram.*

It is said that the ashes of a Kites head or bones, with Oyl, is proper.

Another: Take *Oyl of Worms, and Frogs, each an ounce and an half; Oyl of Roses, and Goose grease* drop into *Vinegar, each an ounce; Acacia, and Pomegranate flowers, each a dram, Cow dung dryed two drams, Salt a dram, burnt Allum half a dram,* with *Wax* make an Oyntment.

Or this: Take *Bramble tops, Sumach, and Housleek,* boyl them in *red Wine,* add *of Barley flower* not ripe and parched, called *Alphitum* as much, with the sixth part of *Pouder of Pomegranate peels* make a Cataplasm.

This is an excellent Remedy to strengthen and ease pain in the Gout. Take an old Boar Cat that is fat and black if it may be had, gut him, and flea him, cut off his Head and Feet, and put him into the paste following. Take *Goose grease, that is the dripping of a Goose,* which fell when it is roasted into a Dripping-pan half ful of *Wine and Vinegar four ounces or six, Pitch, Turpentine two ounces, Badgers grease, Dears suet, each two ounces; Virgins wax four ounces,*

Oynt-

Oyntment of Agrippa an ounce, Frankincense, and Mastick, each half an ounce; make a Paste, stuff the Cat therewith, and roast it, keep the dripping for an Oyntment.

It is good to strengthen weak Hands and Feet, to put them into the Wine-press, where there are black Grapes.

They say *Sextus Pompeius* was cured with Sweating in a Heap of warm Wheat.

Also Baths of Sulphur, Salt, or Niter, both sweat and strengthen. And bucketing of the Head therewith, as the Custom is, cureth the Disease at the Fountain. And the Mud or bottom of such Waters, applied to the parts strengthneth.

Or artificial Baths of strengthening Herbs mentioned, and the skin of a Dog are proper.

In the time of using all these, least the humors be stirr'd up by heat and moisture, and sent to the part which is weak, and apt to receive them, use the defensive Plaisters mentioned.

For Cure, at the first grudging, apply outwardly things to stay the Flux. In the Arthritis, especially apply them to the Joynt within, and bind them if you can, and rowle them.

Make them of Bole, the white of an Eg, and Vinegar, and apply it with Cotton or Linnen.

Or, Take *Bole two ounces, Dragons blood half an ounce, Snakeweed roots, Acorn cupps, each a dram and an half;* pouder them, and with *Vinegar, and whites of Eggs,* apply them, you may add *Pomegranate flowers, Spunge, Roses, Grape-seeds,* and the like.

Or make it of Litharge, Bole, Vinegar, whites of Eggs, and Mucilage of Fleabane seed.

Add a little Oyl to keep it from drying too soon.

Or, Take *Pulp of green Pears, Quinces, Services, Cornil-berries, Medlars, Dates, Olives,* boyl them in *red Vinegar,* with *Crumbs of Bread,* and make a Cataplasm.

Or use the Plaisters against Rhewms in the Eyes, mentioned in Ophthalmy.

Bind the part affected very hard: and the Thighs that the Humor fall not down.

Upon the part also lay (according to the time of the Disease, as it is in the beginning or progress, or as the Flux is flowing or flowed to the part) Repellers, or Anodynes, or Narcoticks, or Dissolvers.

At the first while the Cause floweth, use astringents and repellers, that bind and are cold, when it comes from blood, and there is Heat in the part. But in the Sciatica and other fleshy parts, where the humor lyeth deep, they profit little. These we use with anodynes somtimes and gentle dissolvers; Thus,

Hippocrates bids us use cold Water to repel and cool, or Snow, or cold Vinegar, applied with a Clout often.

Or three parts Water, and one Vinegar, or red Wine two parts, with Bran, and Linseed boyled therein, or Lupins, when the disease is in the increase.

Or boyl Vinegar and Water in the same proportion, with Wheat, or Barley-meal, and Linseed, to a Cataplasm.

Or use Plantane, Lysimachia, Housleek, Violets, Purslane, Endive, Solomons-seal, Fleabane, Nightshade, Pellitory, and Poplar leaves, of Gourds, Water-lillies, Lens palustris, or wild Lentils, with Oyl of Grease, first incorporated with Meals and Vinegar.

Or Coleworts, with Fleabane seed, or Fœnugreek, and Vinegar, or roasted Quinces, and Barley meal.

Or Plantane leaves bruised with Barley meal, and Crumbs of bread, and Oyl of Roses.

Or boyl Bran and Barley meal in steeled Water, with Roses, add Oyl of Roses, and at first Vinegar, and in the increase, Flowers or Oyl of Chamomil.

Or mix the Juyces of the Herbs with barley flower, Oyl of Roses or Violets, with the Yolk of an Eg, and Turpentine and Vinegar.

Or thus; Take *Oyl of Roses four ounces, Juyce of Lettice,* or the like, *two ounces, Vinegar an ounce,* with *two Yolks of Eggs, and Barley-meal,* make a Paste.

Or, Take *Oyl of Roses, and Vinegar, each two ounces; Bole two drams, red Sanders a dram.*

Or a little Cerus, with Waters, or Juyces, and Vinegar, or Oyl of Roses, or Violets, with distilled Waters.

Or the Decoction of the Herbs mentioned, with Vinegar, for an Epithem.

Or use *Galens* cool Oyntment, the Countesses, or Oyntment of Poplar. These are also good when there is a hot Defluxion upon the Loyns.

Or a great pain, use Anodynes, such as by gentle heat, do rarifie and cherish, mixt with Repellers in the beginning, while the Humor flows; and after, when the Matter is flowed or fallen; things that dissolve more: Thus,

Pour warm Milk thereon, or apply it with a Clout. And at first quench Steel in it, and to allay pain, boyl in it Fœnugreek, or Linseed, Hermodacts, or the like.

Or add an ounce of Sulphur, or Litharge, to a pint of Milk, it will discuss what is gathered to the part.

Or, Take *an Eg,* and beat it with *Oyl of Roses, or Chamomil, and Crumbs of Bread,* and apply it with a little *Saffron.*

Or hard Eggs beaten with the fourth part of Myrrh, and Chamomil flowers, and Saffron.

Or foment with Oyl of Roses and Wool, or of Violets, in which Earth-worms are boyled, and after in the progress, with Oyl of Chamomil, and Foxes, Oyl of Eggs allayes pain.

Or, Take *Linseed oyl, Oyl of Earth-worms, and Elder, each half an ounce; Saffron three grains, Camphire two grains,* anoint the part, and roule it up with a Rouler dipt in Boys urin,

Or make a Pultis of sweet Apples boyled, and Oyl of Roses, or Froggs, or Chamomil.

Or apply Cassia, with Barley-meal, and Fleabane seed, with Oyls of Roses, or Chamomil, Rose, Nightshade, or Plantane-water.

Or steep or boyl brown Bread Crumbs in Milk, and add to a pint three Yolks of Eggs, and six ounces of Oyl of Roses, or Chamomil. When you will cool and repel, leave out the Oyls, and add Juyce of Nightshade, Plantane four ounces, Vinegar two ounces, or boyl the Herbs first in Milk.

Or use Fleabane, and Linseed bruised and boyled in Water to a Slime, with Water of Roses, Nightshade, and Housleek, and an Egg, while it is hot, add Mucilage of Linseed, Wax, Oyl of Roses, or Chamomil, and Vinegar.

Or apply Fœnugreek bruised and boyled in Oxymel, or Vinegar, and Honey, or with Juyce of Coleworts, and the fourth parts Vinegar, or boyled in Wine, with the Pouder of Chamomil, and Melilot flowers, and Hermodacts, adding Turpentine, Oyls, and Mucilages.

Or add to the aforesaid, Bean, Lentils, or Barley flower, Oyl of Roses, and Juyces of Herbs mentioned.

Or thus: Take *Bean and Fœnugreek-meal, each an ounce; Barley and Linseed, each an ounce; Marsh-mallow roots, Chamomil and Melilot flowers, each half an ounce; Cumminseed three drams,* boyl them in *Wine, Vinegar, and Honey equal parts,* add *Hens grease two ounces, Oyl of Dill an ounce;* make a Cataplasm.

Or, Take *Althæa roots two ounces, Turnips four ounces, Mallows, Coleworts, Henbane, each a handful; Pompion two ounces, Flowers of Violets, Chamomil, Melilot, and Moulin, each a pugil,* boyl them in *Water and Wine,* add *Fleabane, Fœnugreek, and Linseed four ounces, Yolks of Eggs four, Hoggs grease three ounces, Oyl of Dill and Froggs, each two ounces;* make a Cataplasm.

Narcoticks stupifie the part, and take away pain, and by their heat (as I proved) dissolve the humor, and are not dangerous. Alone, or with Anodynes, and other resolvers: Thus,

The green Leaves of Henbane, Mandrakes, and Poppies bruised or boyled, or Oyls thereof, or their juyces, with Rose and Water-lilly water to foment.

Or

Or Mandrake Roots, and Henbane seed mixed with Bran, or Oyl for a Cataplasm, or with Grease for an Oyntment.

Or thus: Take *Henbane leaves two handfuls, Nightshade, Housleek, each an handful; Poppy tops a pugil, Mandrake roots an ounce, Chamomil flowers and Violets, each a pugil; Fleabane seed half an ounce, Henbane seed two drams,* boyl them in *Milk and Water,* and foment, stamp the residents, with *Linseed an ounce an half, Barley-meal two ounces, Duck and Hens grease, and Oyl of Chamomil, each an ounce;* make a Cataplasm.

Another excellent against pain in the Foot-gout. Take *dryed Elder flowers a handful, Leaves of Henbane* wrapt in *Colewores and baked, four ounces,* bruise and boyl them in *Goats milk,* or to a Pultis, ad *Saffron a scruple, Yolks of Eggs two or three:* make a Cataplasm.

Or use Opium and Saffron, with Milk, *two ounces of Milk to half a dram of Opium,* or *two drams* with *the Plaister of Bread,* or the like. Or with Oynuments, but it is of lesser force. With Fats, it is best *a dram of Opium,* with *four ounces of Aqua vitæ, a little Saffron, and a scruple of Camphire,* and safe.

Or apply Mithridate or Treacle, or Philonium.

Or the Skin of a Torpedo, or the Oyl of it causeth Stupefaction.

Use Resolvers to consume the Humor in the progress, when the Defluxion is stopped: Such as are gently hot, and rarefying, and discuss the Matter, if it be Blood, and hotter if it be Water to consume it, that it turn not to Nodes. And if it be deep, as in the Hip, use stronger Drawers and Consumers, adding things proper for the Joynts, Membranes, and Nerves, and that are approved. These are as follow, and are proper for other Defluxions.

As Oyl of Moulin flowers, mixed with Wine, and made in the Sun.

Or of Elder, or Dwarse-elder Flowers, or the Juyce or Oyl of Dwarse-elder seeds thus made. Beat them being clensed to a paste, boyl it in Water, and take of the skum, put it in a long Glass, and set it three dayes in the Sun, till the Oyl which is green be at the bottom. Also that of the Seeds strained is good, or of Raddish seed, Indian roots, Nuts, and Acorns.

Or Oyl of Cyprian, Ligusticum, or Privet, or of Alkanna, or of wild Cowcumbers, in which Flammula was boyled.

Or Oyl of Froggs, and Worms, and Foxes; or Oyl in which a Weezle hath been boyled, or a young Stork, or Swan, or the Livers of the fish *Galeus,* or Sows or Hogslice, called *Aselli* or *Millepedes.*

Or Oyl of Mans bones, or Horse-jawes, when they are beaten, and burnt, and mixed with Oyl, and then an Oyl drawn by a retort, or the like. Some commend the Oyl of Deers blood.

And other hot Oyls mixed with them, as Oyl of Bays, Costus, Elder, Nard, Rue, Orris, Wall-flowers, Lillies, St. Johns-wort, Euphorbium, Castor, Bricks, Turpentine, Petroleum. Some add distilled Oyls to them, as of Spike, Juniper-berries a dram, to an ounce of the other. Oyl of Guaicum, and Sulphur, and Tartar, are also good. The Chymists use Oyl of Salt, made with red hot Bricks, and Oyl of Danwort berries. Others boyl Salt in Oyl, and anoint.

Or an Oyl made of the Marrow of Veal bone, and as much old Oyl, and Oyl of Worms, Groundpine, and Saffron gently boyled.

Another: Take *Sallat-oyl, and of Bayes, and Turpentine, each equal parts;* add *Mastick, Myrrh, Frankincense, one part,* draw an Oyl.

Or thus: Take *Oyl of Turpentine a pound, Sage an handful,* boyl them in *Balneo,* take out the *Sage,* when it is cold, and add new three or four times, and add at last *powder of Sage, Opopanax, and Ammoniacum, each four ounces;* boyl and preserve it.

After you have anointed the Part therewith, lay on a Plaister of Tachamhaca.

An excellent Oyl against Sciatica. Take *Oyl of Nuts six ounces, wild Cowcumbers, Flammula, or Iberis, or Sowbread roots bruised, or three ounces of the Juyces sliced, Earth-worms twenty, Sagapenum, Ammoniacum dissolved an ounce, Sack two ounces, Aqua vitæ an ounce,* boyl them till the *Juyces* be consumed, and strain it.

Or, Take *Pellitory roots, and white Hellebore, each half an ounce; Hermodactls, Turbith, Rue, Wormwood, each two drams; Coloquintida, and Euphorbium, each a dram; Salt a dram and half,* infuse them in *old Oyl,* and add *Wine, and Aqua vitæ an ounce,* set it in the Sun, and boyl it.

Or use *Mathiolus* his Balsom.

Unguents, as of Greases of Men, Goats, Sheep, Hogs, Calves, Geese, Hens, Ducks, Foxes, Bears, Cats, Serpents; also Oesypus, or Grease of Wool, and Marrows of Horses, Dear, Calves with Wine, and Aqua vitæ, are also good.

Prepare Goose grease thus, and it is excellent. Gut a Goose, and fil her with flesh of a Fox or a Cat, and Groundpine, Sage, Rosemary, Marjoram, Bettony roasted, receive the dripping into Water and Vinegar, or stuff a fat Goose with Pitch, and the dripping is rare against the Sciatica.

Another, take Dears suet, and Ox marrow, and add as much Aqua vitæ, set it in a glass, in a Horse dung till fifteen dayes.

Or dissolve Sagapenum and Galbanum in Oyl.

Or thus: Take *Juyce of Dwarse-elder, Oyl of Rue, each two ounces, Gum Ammoniack dissolved in Aqua vitæ half an ounce; Mastick, Frankincense, each a dram; Castor half dram, with Turpentine* make an Oyntment. *f*

Or, Take *Juyce of Danewort, and old Oyl, each an ounce;* boyl them, add *Mummy half an ounce, Camphire a dram.*

Or thus: Take *Oyl of Roses, Linseed, Lillies, Chamomil, each an ounce; Juyce of Smallage an ounce an half, Mucilage of Linseed, and Goats grease, each an ounce;* boyl them, and with *Wax, and a little Saffron* make a Liniment.

Or use the four hot Oyntments, of which Dialthæa is the mildest, Martiatum, Agrippa, and Aregon are strongest. Or use those proper for the Joynts, as Ebulinum, Divinum, Nervinum, Vigonis.

Or these: Take *Roots of Orris and Birthwort, each three drams; Pellitory, Turbith, Hermodactls, each two drams; Bay-berries a dram and half, Coloquintida a dram, Pepper, Nutmeg, each half a dram; Saffron a scruple, Storax half a dram, Frankincense two drams, Bdellium a dram, Euphorbium and Castor, each half a dram,* pouder them, and add *Oyl of Bayes, and Goose grease, and an ounce of Turpentine, Oyl of Spike half a dram, and Cow dung;* make a Paste.

Another against the Stiatica. Take *Oyl of Lillies two ounces an half, Wall flowers, Worms, Fox grease or Goose, each an ounce an half; Juyce of Elicampane three ounces, Gum Ammoniack dissolved in Aqua vitæ an ounce, Sowbread roots a dram and half, Pellitory, Orris, Mustard seed, each a dram; Hermodactls, Castor, Euphorbium, each half a dram;* with *Turpentine* make a thick Oyntment.

Or this Plaster: Take *roots of Elicampane, Costus, Orris, each half an ounce; Sowbread and Cookowpints, of each two drams; Hermodactls, Piony and Mistletoe of the Oak, each a dram; Mustard, Rockes and Rue seed, each a dram and an half; Cummin seed and Bay-berries, each a dram; Pepper, Mace and Cloves, of each half a dram; Saffron a scruple, Myrrh, Frankincense, Storax, each a dram; Niter and Vitriol, each a dram and an half; Euphorbium, Castor, each half a dram:* make a pouder, add *Ammoniacum an ounce, Bdellium, Galbanum, Opopanax, Sagapenum, each an ounce;* dissolved in *Vinegar and Aqua vitæ,* add *Storax liquid a dram, Labdanum, Laserpitium, each a dram and an half;* with *Oyl of Lillies and of Rue, Turpentine, pitch, Rosin and wax,* make a plaster and wrap it in a sheeps Skin.

Another: Take *black pure and shining pitch, Rosin, each half a pound; Sheeps suet, Goose grease, each four ounces;*

Oil-

Olibanum half a pound, add to it *cold Cummin seed two ounces, Pepper half an ounce, Oyl of Spike half a dram*, make a plaster.

Or: Take *the Marrow of Veal, Oyl of Roses, of each two ounces, burnt Salt a dram and an half*, anoynt the sees, add *dryed Ox lungs two drams*, and it will be better.

Or thus: Take *Oyl of Nuts, Goose and Fox grease and Calves marrow, of each two ounces; Frogs ten, Earthworms washed in wine two ounces, Hog lice thirty, Salt half an ounce, Sack three ounces, juyce of Danewort, Elder, Ivy or Ground-pine two ounces*; boyl them, and add *Turpentine and Wax*, for an Oyntment.

Or use, *Diachylon, to a pound* add *Sulphure an ounce, Chalcitis half an ounce*.

Or this: Take *old Oyl a pint, Litharge three ounces, Brimstone a dram, Chalcitis half an ounce*, boyl them, and add *Mucilage of Linseed and Hogs grease, each two ounces*; make plaister, or Oyntments.

Or use Apostolor.

Or: Take *Oyl of Bayes two ounces, of Worms and Bricks, each an ounce; Soape an ounce and an half, Calves marrow an ounce, Turpentine half an ounce, Ammoniacum, Opopanax, Galbanum*, all dissolved in *Vinegar, each a dram and an half; Myrrh, Frankincense, Mastick, of each a dram; Birthwort roots half a dram, Litharge, Sulphure, each a dram; Verdigreese and burnt Salt, of each half a dram; with Wax*: make an Oyntment.

Or thus: Take *Oyl of privet, Elder or Dane wort two ounces, Oyl of Turpentine and Ox grease, each an ounce; Glew* dissolved in *Wine, an ounce, Frankincense a dram, Niter and Lime, each half a dram*; some add the *stone Asius*.

Or use plaster of Frogs by *Vigo*: in strong Defluxions and Sciatica pains, with more Quick-silver and Euphorbium; of which we shal speak in the French pox.

For the Sciatita wash with Sage, Lavender, Balm water, and the like, with as much Aqua vitæ.

Or dissolve black Sope in Aqua vitæ and anoynt: it is a good remedy in all cold Defluxions.

Or boyl urin of a boy till it be as thick as Honey. Or anoynt with Womens terms, as *Dioscorides* prescribes.

Or with Ashes of a Weezle, Beans, Cole-worts, with Vinegar or Grease.

Or with juyce of Nettles, Rue, Sage and Coloquintida or Indian Nuts.

Or use pouders of Snayles shels burnt, or of rust of Iron Jet, with juyces prescribed.

Or make remedies of other plants, as of Moulin, Nettles, Rue, Mugwort, Smallage, Sun-flower, Scordium, Wall-flowers, Mouse-ear, Comfrey, Moss, Sesami seeds and roots, Hemp, Birthwort, Dittany, wild Cowcumber, Daffodil with Honey and Vinegar, or boyled in water and wine, or their juyces with meal.

In the Sciatica bruised Iberis and warmed is good, or Cardamine, Water-cresses.

Or Elicampane bruised or boyled in wine.

Or wild masterwort, like Danewort, which is called Goutwort, for its vertue.

Dioscorides applies Balm and salt.

Or to the Sciatica, Sage, Rue, Juniper berries with wine and Boys urin.

Or Linseed and Chamomil flowers, boyl'd in a bagg in wine.

Or hot bread made of Secaly and Carway seeds.

Or Bran boyled with Sapa and Salt in the Knee Gout.

Or use Bean, Barley and Lentil meal boyled with Oxymel.

Or Bran flower boyled in wine, adding Aqua vitæ and Butter.

Or Raysons stoned, with Opopanax.

Or Sea moss, or Pulmo, or Fucus marinus green, or Androsace.

Or Agarick beaten with Goats Milk and Barley meal,

Or Dwarf-Elder, or Elder bruised, or fried in Butter, or Hogs grease with Plantane roots.

Or Rue and Bettony with Hogs grease and Salt.

Or Motherwort with grease and Vingar against a Defluxion.

Or Briony roots beaten with Aqua vitæ and Hogs grease, or Briony and Cookowpints, or Dragons, or Fig leaves with Cowdung and Honey.

Or: Take *Nettles bruised a pound, Oyl of Bayes two ounces, Petroleum half an ounce*.

Or Coleworts bruised with Marjoram and Bdellium, dissolved in Aqua vitæ, or Vinegar and Coloquintida.

Or: Take *Turneps roasted a little, and then boyled a pound, Fenugreek meal two ounces, juyce of Dane-wort two ounces with Honey*.

Or Pouder of hermodacts Barley and two yolks of Egs, and Honey.

Or: Take *Fenugreek and Lupine meal a pound, Pouder of Darnel, Althæa roots, Chamomil and Melilot flowers three ounces, Cummin seed an ounce, boyl them in Honey and Wine*: make a pultis.

Or: Take *roots of Althæa, Lillies, Briony, Dwarf-Elder each two ounces, Sage, Ground-pine, Wormwood, Marjoram, each a handful; Chamomil, Melilot flowers and bran, each a pugil*; boyl them in *Ale*, bruise and add *Barley, Lime, and Fenugreek meal two ounces, Mastick an ounce, Oyl of Bricks three ounces, Saffron a scruple*.

Or thus: Take *dryed Penny-royal, Sage, Savin, Bay-berries, Hermodacts, of each a dram; Mastick half an ounce, Storax two drams, Turpentine three drams, with Honey*, make a plaster.

Or: Take *pouder of young Nettles a pound, of Sage half a pound, bay Salt a pound, pickled Hering-Rows half a pound, Spirit of wine a pint with Benjamin three or four ounces* dissolved therein, make a pultis and repeat it if it ease pain, if not, take *four ounces of Rose water instead of Spirit of wine, with an ounce of Fleabane seeds and with Acacia and Oyntment of Litharge*: make a Cataplasme.

Against the Sciatica: Take *leaves of Iberis, Water-cresses, or Elicampane, each two handfuls; Calaminis a handful*, bruise them, or boyl them in *wine*, add *Lupine meal three ounces, Honey two ounces, or Grease and Oyls, or Vingar, or Aqua vitæ* to make it peirce.

Or: Take *roots of wild Cowcumbers and Bryony, Orris and Elicampane a pound*, boyl them in *wine and Honey*, bruise and add *Lupine meal two ounces, Cummin-seed an ounce, Goats dung three ounces*, make a pultis.

Another: Take *roots of Althæa, Briony, wild Cowcumber, each two ounces; of Orris and Elicampane, each an ounce and an half; Pellitory, Hermodacts, each an ounce; Iberis, Lepidium, or Flammula, Calaminis, Rue, Penny-royal, Time, Balm, each a handful; Sage, Rosemary, Stechas, Lavander, Chamomil flowers, of each a pugil*; boyl them in *wine* add *Honey, Fænugreek, Lupine four ounces, Bay-berries two ounces, Rue seeds an ounce, Goose grease two ounces, Oyl of worms three ounces, Sulphure an ounce*, make a Cataplasme.

Or thus: Take *Orris, Pellitory roots, of each two drams; Dwarf-Elder and Dragons, each an ounce; Bay-berries an ounce, Cummin seed an ounce, Sulphure six drams, Niter two drams*, make pouder, add *Barley meal two ounces, with Vinegar, Honey and Turpentine*: make a plaster.

Dioscorides commends Scammony boyled in Vinegar and mixed with Barley meal, against the Sciatica.

Or: Take *Pitch two parts, Sulphure one part*, pouder them and lay them upon a paper dipt in Aqua vita, lay it on after bathing especially, let it stick while it fal off of it self.

Or: Take *Tar half a pound, white Hellebore and Sulphur vive, each an ounce and an half; Euphorbium half an ounce, Aqua vitæ an ounce*, incorporate them with the *Aqua vitæ last*, and stirring continually, apply it warm.

Or apply Frogs spawn, or boyl it in a covered Pipkin and apply the fat that swims.

Or apply Snailes, bruised with their shels.

Also put whol live Snails shels and all, into a strainer, a handful, and a handful of salt, and thereupon a handful of Danewort seeds, and then snailes again, and after that salt and seed, four or five laies on upon the other, and hang the strainer in a Cellar and take the Liquor that drops out which is glutinous, and put it in a glais to the sun for four dayes and then anoynt the part.

Or apply the flesh of Cray-fish, boyl'd and beaten with Briony roots, and Aqua vitæ.

Or boyl beaten Harts horn, with white Wine, till it be thick, and apply it.

Or a pickled Herring.

Or Wolfes Flesh, or Veal half roasted.

Or the Skin of a Dog.

Or hot Cow dung, it will presently ease pain, to which add Oyl of Roses at the first, and in the declination, Oyl of Chamomil, or Honey.

If there be a Tumor. Take *Cow dung a pound, Sapa an ounce, Bean and Fænugreek flower, each two ounces; Cummin an ounce,* with *Oxymel.*

Or thus: Take *Goats dung and Bean flower, each equal parts*; make a Cataplasm, with Wine and Oyl, add *Salt* when the pain is abated.

Or white Dogs turd, and Pellitory boyled in strong Vinegar.

Also apply Stuphes, or Spunges, or Baths in the Sciatica and Knee Gout and other Defluxions made of Calamus Elicampane roots centaury and to strengthen, of Cypres Nuts, Calamints, Ground pine, Germander Wormwood, southern-wood, Bettony, Prim-rose, Sage, Marjoram, Rose-mary, Pennyroyal, Mints, Chamomil, Melilot flowers and of Dill, Stœchas, Lavender, boyled in water, adding wine, lie or urin. When you will dry more, add *an ounce of Sulphure vive and of sal Niter, and sal Gem, each half an ounce.*

Or with a Decoction of Turneps and Sowbread, Foment.

Or with distill'd water of Moulin and red wine, or Ox Galls, or Soap distil'd.

Or: Take *Sage, Rue, Groundpine, Wormwood,* and others mentioned in Sciatica for Fomentations, *four handfuls*; *Sulphure, Salt, each two drams*; *Wine two measures,* distill a Water and Foment.

Another: Take *green and white Vitriol, each an ounce*; *Camphire two drams, Aqua vitæ and white wine, each a pint*; Foment with clouts dipt therein.

Or with Salt and Vinegar, Sulphure and Vinegar, water and Niter.

Or quench Lime in urin and foment, or in Vinegar.

Or: Take *Lime and sulphure, each three ounces*; *and with Oyl made of Bole and wild Cowcumbers,* make an Oyntment, use it hot.

Or bath the feet in a Lie made of Hemp.

Or make bags of the dry Herbs mentioned.

Or of Milium and Bran and salt and Chamomil flowers.

Or rowl the Knee with scarlet spread with salt.

Fumes are good also again the Defluxion and pain and to strengthen, out of the fit, and to dry up the humor, especially in the declination.

Made of a Decoction of proper Plants, as of white Dittany, Pennyroyal, Wormwood, Rosemary, stœchas, Chammomil flowers: boyled in Water, Wine or Lie. In the Sciatica, put green Sage in a hollow Tile red hot and stir it that it burne not, and sprinkle it with Vinegar and and apply the Tile, so that the vapor may come to the Hip.

Or use these drying Fumes with Cotten wooll or clouts as of Mastick, Frankincense, Myrrh and Amber, Labdanum, Benjamin, Storax, Gallia, and dryed Herbs, as Rosemary, and the like, *with two ounces of Cinnabar, and half a dram of Orpiment,* made into Troches, with *Turpentine,* in the Sciatica.

If the fourth sort of French Pox, which is with pain about the bones, come from an evil quality, because the Cure is as the other by divers great evacuations and alterations, as in the Pox with Ulcers, and the like, therefore we shall refer the Cure of it thither. *The Cure of the French Pox.*

If there be pains about the bones, from an evil quality, or external Head-ach as in the Pox, you must cure it as an old Head-ach, and if that will not do, use stronge Evacuations and Topicks, as in the French Pox, as those of Quick-silver, which cure this malignant pain, when all things fail. *The Cure of an outward Head-ach from a malignant quality.*

If the humor falling down and causing Arthritis hath perversity in it, it will not be cured, but with strong things and topicks, that have Quick-silver, as Emplaister of Vigo. *The Cure of a sort of malignant joynt Gout.*

As for the malignity, which depraveth the sense of feeling, in regard it is in the humor that is fallen down, such as causeth numness and palsie, it must be cured as they are, with strong means. And therefore we shall not here lay down any new Method of curing the same. *The Cure of pain coming from malignity when feeling is depraved.*

CHAP. XVII.

Of Pains in the Superficies of the Body.

The Kinds.

WE call those Pains in the Superficies of the Body, which are in the skin and part adjacent and near it: of which there are divers kinds: differing in this respect, that some are alone and others have other appearent diseases with them.

Among the solitary pains of the superficies of the Body, without any other diseases, the first is tickling, which though it seems pleasant, yet if it be much it is very troublsom, as in the soles of the feet, under the Arms in the pits, or in the sides, and the like. *A tickling in the superficies of the body without any other diseases apparent.*

Hereunto belongs the Itch in the skin, without other manifest sign: such as goes befor the skab and as is in the parts with Hair, as the Head. Privities, from divers causes, which shall be declared, so troublesome that it causeth scrubbing and tearing the skin with the Nayles. By which means they are so refreshed and pleased that they feel not the pain or hurt. *Itch.*

There are other pains in the superficies of the body without other manifest disease, that come from outward causes, as from heat and excercise, without Inflammation of the skin, but with heat pricking and itching: to which the heat in the palms of the Hands and soales of the Feet, may be referred. *Pain from heat.*

Also there is a tearing and biting pain from cold in the superficies, especially at the fingers end. *Pain from cold.*

To this may be referred the Molestation that comes from touching an uneven and rough body: Which is felt without any manifest hurt, while the skin is pressed and streatched for a time. *Pains from touching of rough bodies.* *Pain from compression and distention.*

There

Pain from Contusion or bruise. There is somtimes great pain from a bruise by a Fall or Stroak, without apparent hurt that pricks and tears; but because usually there is a Tumor or Wound with this pain, we shall speak of them together.

Other Pains that have other Diseases joyned, are distinguished by Redness, Swelling, Pustles, Ulcers, or Corruptions.

Erysipelas. Redness and pain without swelling, is called *Erysipelas*. This comes to many by fits. In this the superficies of the skin, in the Shins somtimes, or Face, or Neck, or other parts hath a broad Redness, which being pressed with the finger, flies away, and presently returns, and then turns yellow after some time, and after pale, and so vanisheth. It is with burning also, therefore it is called *holy Fire*. *Holy Fire.* And because it is pricking, *Avicen* calls it the *Thorn*. After all these Itching use to be and the skin is cleft either of it self, or by rubbing; besides, there are in the parts near, for the most part Glandules or Kernels that swell, and are pained, as in the Groyne and Neck. And as I shewed in Feavers, there is a Synoch therewith, that begins with shivering, and turns hot for a day or two. And somtimes it is without it, or but very little.

An Erysipelas with a Phlegmon Besides this simple Erysipelas, there are two compound kinds thereof. One is like the simple, only there is a little rising that is dispersed, and not collected into a true tumor, this is called *Erysipelas Phlegmonodes*. This ends as the other, but is longer. Somtimes there are Pustles in Erysipelas, and Blysters about, blew or black, which breaking, produce matter, and the part is ulcerated, this is called *Erysipelas* ulcerate. And it ends often in a preverse spreading Ulcer, that Gangræns if not well tended. *An ulcerated Erysipelas.*

An œdematous Erysipelas. There is another kind that is less hot and red, but higher and broader, called *Erysipelas Oedematodes*, with Blisters somtimes also, that are whitish, which breaking, send forth water or matter. In this kind, though the Erysipelas cease, yet the Oedema remains long, and falls into the Leggs in some.

Erysipelas in the legs of them which have the Dropsie Ascites. Also if there be Erysipelas in the Leggs that were formerly œdematous from an evil Humor, especially from the Dropsie Ascites, which is easie, then it turns into a true Inflammation, which will gangræne, except it be carefully tended.

Small Erysipelas. We have seen small Erisipelases in the skin, with broad, red, burning Spots, not filled up.

The Humors in the Superficies of the Body. Diseases with Tumor in the Superficies of the Body, are some more usual, and come of themselves, and are in divers parts without difference: or in certain distinct parts external: And are called Tumors in general: Or imposthumes, because they follow Tumors. Others are unusual, and come seldom and are called Cancers of which in order.

Phlegoses. There are painful Tumors indifferently in any part of the Body, that arise of themselves without any manifest Cause, that are raised and deep, and red, with heat, burning, stretching, and beating, called *Phlegoses*.

Phlegmon or Inflammation. One kind hereof is spread as an Erysipelas, but more swollen, and lifted up, collected, extended, and deep fixed, and is called *Phlegmon* or Inflammation in general. In this after the redness and pain, the skin is yellow, blew, with Sugillations or Markes, till the tumor quite vanish. Somtimes with increase of pain, it turns to a greater Tumor or Impostheme, and that broken into an Ulcer, and leaves a Scirrhus or Gangræne, as shall be shewed.

Phlegmon erysipelated. Besides this simple Phlegmon, there are two Compound kinds, the one with a larger tumor, but else in all things like an Erysipelas called *Phlegmon Erysipelatodes*. The other with a larger tumor, but less hot, red, and burning, called *Phlegmon œdematodes*.

Phlegmon œdematous. This Phlegmon whether simple or erysipelated or œdematous, may be in any part of the Body. If in the Face, it disfigures the Look: If in the Neck or Jawes, it hinders breathing, and makes an outward kind of Quinzie. If in the Breast, and be deep, it is a kind of false Pleurisie; if in the Belly, and deep, it hindereth going to stool: If in the Hands or Feet, it pains and troubles them.

Tuberculus or Pustle. There is another sort of Phlegmon more collected, and acute, or pointed, like an Inflammation in other things in any part, which because it is less then other Inflammations is called *Tuberculum*, rather then a Tumor. One kind most usual, which is like a Wallnut, which ends usually in an Ulcer These are in divers parts alone, or many together, swelling and red, with tearing and burning pain, which pain increasing, they end in an Impostheme, which opens, and is an Ulcer which hath either white or bloody matter.

Furunculus, Clavus, or little Cancer. And if instead of matter there be a lump of flesh, they call it *Furunculus* or a Nail, because it is fixed in the flesh, and the German Chirurgions cal it *Crebstin*, or a little Cancer.

Tumor from Contusion. Contusions are referred to Tumors in the Body, and are so called from the Cause, which is a stroake or fall, in which there is either a gathered or spread Tumor, lifted up more or less, with, or without Inflammation of the same colour; and somtimes blew, and yellow, with markes, vanishing, or turning to an Impostheme, and so into an Ulcer. If this Contusion hath a Wound, it belongs to Wounds. And if there be pain in Contusion without Tumor or external appearance, it shall be spoken of in Pains in the Superficies of the Body.

Tumors in the Glandules or Kernels. There are often Tumors in the Glandules that are the in Emunctuaries, especially immediately under the skin, which somtimes are lifted up with the skin, with pain and heat, and somtimes Inflammation. And if this be, and dissolve not, it impostheumes, and then ulcerates. This Tumor what soever it is, if there be Inflammation is called *Phygethlon* and *Panus*, and if it be less, and plainer, or evener, and not so red and painful, it is called *Phyma*, which sooner increaseth, and impostheumeth. There is the like tumor somtimes behind the Ears called *Parotis*, that grows somtimes very great. Somtimes it is in the lower Jaw, and is called *Panus*, it comes often in Synoch Feavers, and it is called in high Dutch *Kervunkel*, though it be not alwayes red, when it is under in the Arm-pits, it doth not so easily impostheume, it is called *Panus* also and *Bubo*: And so it is called in the Groynes. Some of these are simple *Buboes*: Others are from the Cause called *Venereal*: Others malignant from the Feaver and pestilential, they are small at the first, and then grow great, and have often an Anthrax or Carbo with them.

Phygethlon. Panus. Phyma. Parotis.

Bubo venereal and pestilential.

Tumors in the Papps and Stones. Also in the glandulous parts of the Superficies as the Papps and Stones, are outward Tumors as in the Glandules mentioned, when they are inflamed, swollen, hot, red, and pained. This is called Inflammation of the Papps and

and ſtones which turnes often to a ſcirrhus. Or ſomtimes theſe pars ſwel, without a manifeſt Inflammation and are ſtretched and pained as the breaſts with milk and the ſtones in the colick.

Tumors with Inflammation of divers parts.

Alſo theſe kinds of Inflammations are in other ſpungy parts of the body, as in the heels when they ſwel, are rough and hot and then ulcerate and are often loſt, or in the Glans or head of the yard; whoſe Inflammation ſomtimes makes a great tumor ſo that the præputium or foreskin ſtreight binds it at the root. This is likewiſe in the prepuce and in womens Privities and in the Fundament. And in the Mouth and Lips and Eyebrows with great pain, by reaſon of exquiſite ſenſe; and it often turnes to perverſe ulcers and Gangrens.

Alſo in the griſtly parts in the ſuperficies, as in the Noſtrils and Ears there is Inflamation, and the griſtles are made foul thereby, when it increaſeth and the Noſe falleth.

But Inflammation in the joynts is with greater pain and hurt: as in the Arms and Legs. And this is often

Paronychia Pannaritium

in the joynts of the fingers and toes about the roots of the Nayles, and this Inflammation is called *Paronychia* and *Pannaritium*, which a Sphacelus often followeth, and corruption of the outward bone and ſomtimes of the inward bone of the finger, whereby it laid bare or loſt and the Nerves and Tendons hurt, this is called the worm: becauſe pain ſeems to creep while it is inflamed and turns to an impoſtume. There is another Inflamation betweeen the Thumb and forefinger with a tumor called

Fork or Grippelen.

by the Germans *Grippelen* or fork, becauſe it is between the fingers.

Apoſtume or Impoſtume.

An Impoſtume, is a tumor which follows other humors in the ſuperficies, it is called *Abſceſſus*, becauſe the skin comes from the fleſh: This may come from all ſorts of Inflammations except they be inſenſibly diſſolved; as from a fiegmon in general, or from Tuberculum whoſe Impoſtum is called *Furunculus*. And from Phygethlon whether it be a Bubo or Parotis, and ſooneſt from a Phyma. Alſo it may come from ſwelling of the paps and ſtone and other ſpungy parts, or griſtly, inflamed. And from the joynts inflamed, which are very troubleſome; and that from the *Paronychia* or Inflammation in the finger, if it Impoſtumate, is perverſe and deep and corrupts the Nerves and bones. All theſe Impoſtumes coming from divers Inflammations, are divers. If the Inflammation be only ſuperficial the humor greater or leſs ſhining and hard at firſt, and after grows ſoft and pointed, which is called the Eye, out of which the matter labors to get forth, which you may perceive by the motion of it being touched, it is of one ſort. And it is of another ſort when it comes from an Inflammation that lyeth deeper for then it is not ſo eminent, ſomtimes it is almoſt wholly hidden, till by a puſtle breaking, which the Chirurgions cal *Exitura*, or outlet, it appears.

Exitura or outlet of the Chirurgions.

This is of the ſame color with the skin and makes a doubt whether there be an Impoſtume or not, we conclude that there is matter, becauſe pain is ſtill felt there and becauſe it is wet like dew, and being preſſed with the finger the matter ſeems to go back and there is a hollow. When an Inflamation turns to an Impoſtume the pain doth not abate, but increaſe rather, and creaſeth not till it be opened and it itcheth when the matter labors to come forth. Nor doth a Feaver with Inflammation ceaſe, but increaſeth with the pain while the Impoſtume or matter breedeth according to *Hippocrates*. The matter in an Impoſtume is divers; as pus, or ſanies or fleſh, which comes from the ulcer.

Cancer.

A Cancer is a tumor which cõmeth of it ſelf in the ſuperficies of the body that hath more malignity then pain, for which cauſe the Chirurgions cal other perverſe Tumors and Puſtles, as a Furuncle and Carbuncle by the name of Cancer, as that under the Eye, and the Polypus in the Noſe and the Gangreen of the Gums, and Ulcers of the prepuce. And they call an *Elephantiaſis*, with Tumors and Ulcers, in divers parts, a Cancer alſo, as we ſhew'd. From theſe a true Cancer called *Carcinos* differs much. Which is called alſo *Lupus* or *Wolf*, becauſe it devours the fleſh and *Noli me tangere* or touch me not, becauſe it will not endure ſharpe Medicines. This

Wolf or Noli me tangere.

may be in any part, Hips, Legs, Knees, Arms, Neck, Face and Breaſts often, and in the privities, and in the Mouth and Lips. It begins at firſt with a little tumor ſcarſe to be ſeen, then it is as big as a peaſe, then as an Hazel-nut, then as a great Apple, hence it is called Cancer from creeping ſon and reſembling a crab; not the *Aſtacus*, or Crayfiſh, to whoſe Legs the Veins are compared, but the true ſea Crab called *Gallus marinus*, which is round as this tumor is, uneven and with tubercles or little ſwellings and full of Veins ſwollen about blew and black, hard alſo and with a cruſt like a crabs ſhell, and ſticking cloſe to the part; And *Archigenes* ſaies it is ſo called, becauſe it holds whatſoever it catcheth. The pain is little or none at the firſt, which cauſeth the negleſt, but it is known by the pricking of the skin like a needle, which increaſeth with the tumor.

A Cancer ulcerated.

At length this tumor is laid naked, by the opening of the skin, and then it is called *Carcinoma* or a Cancer ulcerated: out of this comes filthy Sanies, or thin matter, ſtinking, yellow, green firſt and then black. The fleſh is uneven and corrupt and grows out like Ice-ſickles, with hard and inverted Lips, which

Carcinoma.

are ſomtimes ſo big, that they have covered a great part of the face, and made the Ear ſeem to grow thereto, as I have ſeen. When this *Carcinoma* or Cancer ulcerated, is naked, it bleeds, by which through want of ſtrength, with a gentle feaver comes death, which I obſerved in a Dyer in little *Baſil* in 1552. whoſe right Cheek was ſwollen to the great corner of his Eye, with Ulcers, with Lips turned in and ſtinking in the hollow all over, which bled often very much and after great miſery with a gentle feaver brought his much deſired Death.

Puſtles in the ſuperficies of the body.

The chief kinds of Puſtles are ſcabs, Papulæ and Carbuncles, which have divers kinds under them, theſe are leſs then Tuberculæ, yet they itch with burning and Inflamation and ſomtimes without, with pain and knawing or ulceration of the fleſh.

The common moiſt itch and ſcab.

Scabies or Scabrities is ſo called, becauſe it makes the skin rough and with a cruſt, and is moiſt or dry. The moiſt is with Puſtles that have ſanies and Pus, one is called vulgar, in which many Puſtles called *Ephelides* do ariſe, from which broken ſanies or thin matter cometh; if they be a little inflamed and red, they impoſtume and are covered with a dry cruſt made of the dryed matter, which is blew or black or otherwiſe Colored. The itch goeth before this ſcab, which cauſeth puſtles by ſcratching, which break when the skin is broak, there is after a cutting pain, and if the puſtles be inflamed, there is burning pain. This ſcab or itch is ſo frequent, that ſcarſe one is freed, but in his life time hath it.

The Cruel ſcab called Agria or Fera, in Dutch Herbroken.

There is Another moiſt ſcab leſs uſual then the former, but worſe with little puſtles out of which cometh a rough humor like Honey alwaies moiſt and coveting the parts, with a thick white, green or black ſcab. Some call this

Fera or *Agria.* The Germans call it *den Herbroten*, or *Harbroten*, when the part affected is like a toast covered with hairs. This is often in Infants heads, seldom in aged, sometimes it is in the Eye-brows, Cheeks and Face, very noysome, and in other parts.

Running Ulcers of the Head called Tinea, Achores or scald.

There is another kind of scab, peculiar in the Head, which with many smal holes peircing to the Skul, out of which come glutinous matter, that being dried causeth a crust or scab: therefore they are called sordid running Ulcers, by the Greeks *Achores*, and because the skin looks like Moath-eaten cloth, it is called *Tinea* a Moth. And the English call it the running scab of the Head and the scald. And if the holes be large and the matter like Honey, it is called *Favus* from the likeness it hath to a Honey comb. This is perverse and usual in children spoyling the roots of the hairs, which are white and thick, when the hair is pulled off, and after it is cured, it leaves many bear places in the Head, which is ill favoured to be seen.

Favus.

There are other pustles, which may be referred to the moist scab which have a dryness at the top and sweat and moisture. Some whereof are with greater Imflammation and Ulceration, as those called *Terminthi*, because they are as big as Lupines or Pease. The Germans call them *Hunsblatern*, they are black round and red and inflamed about, very burning and quickly dry: and when the scurfe is taken off, or lifted up matters comes forth. They are most usually in the feet and many together, *Galen* describes them to be most common in Women, and some say they are a kind of Phyma. *Epinychis* is not unlike this, it is as big as a Terminthus, blew and very red round about and burns very much at night, and turns to an Ulcer and sends forth slymy matter.

Terminthus

Epinychis.

Also there are waterish pustles called *Phlyctænæ* that being broken have a scurfe and are painful: they are smal as bubles or greater like bladders, which broaken send forth clear water, with pain, and a crust: they may be in any part.

Phlyctænæ.

There is another kind that hath yellow transparent bladders, which being whol, itch and burne, and being open yellow water comes forth with great burning and Inflammation and a running Ulcer: it is called *Herpes Phlyctanodes.*

Herpes Phlyctanodes.

The dry scab or *Scabrities* is so called in distinction from the moist, which hath dry pustles without matter and makes the skin rough and itcheth much. It is of two sorts, one is in the extremity of the skin with little pustles dry red and corroding, more or less sweating moisture forth, with intolerable itch called *Prurigo* or in Greek *Cnismos* of some *Impetigo* and *Psora* or Scab. And *Rubrica*, it is about the Emunctuaries in the Groyns and Arm-pits, and bending of the Knees and Arms, and most usual in the Neek.

The dry scab.

Prurigo or Cnismos.

The other kind of dry scab is worse, called foul, and in high Dutch *Mager*, because it makes the body lean and dry by degrees: it comes of it self or from a Herpes not cured. And is at first greater then *Prurigo*, making the skin rough and dry: the Greeks call it *Lichen*, it is chiefly in the Legs and Arms: sometimes if the scabs creep and make the skin more rough, hard and swollen, with chops, and being rub'd bran fals off, and then the Greeks call it *Psora*. It is not only in the Feet and Arms, but in other parts, especially the Neck and Face and Head, in the Hair like a scurfe of Clay or Chalk, from which a dry scale falls and it is horrible to behold. If it last long it corrods and makes clefts in the skin, and there fals thick scales yellow or blew, this is the Greek *Leprosy*, not the *Elephantiasis* of the Arabians, though they are taken one for the other, but this is more incurable, and returns again, and is as horrible as Elephantiasis, especially if it eat off the Nose. We call this the worst Scab.

The foul scab.

Greek Leprosy.

Papula or *Herpes* comes forth with little Pustles, first with itching, and then burning, but with Inflammation or Feaver; and though the Pustles dry, new come about them, as if they were begotten of the former. Some are like Millium seed called *Herpes miliaris*, which creeps but sooner stayes.

Papula or Herpes of the Greeks.

Herpes miliaris.

Others are dry little Pustles, and are deeper in the skin, and break into Ulcers with one Matter, and when cured, returns with new dry Ulcers, broad and high. This is called *Esthecomenus*, or in high Dutch *Den worm*, from its creeping and corroding; if it last long it turns to *Impetigo*, and then into a *Psora*, and after into the Greek Leprosie, but not into Elephantiasis. When it ulcerates, it is like Erysipelas ulcerated, and call'd the *holy fire* or wild fire but Erysipelas comes suddenly with Inflamation, Redness, & Feaver, and being ulcerated hath greater Pustles or Bladders, and after them a moist Ulcer, which is not so in Herpes, but dry and without matter.

Holy or wild Fire.

The Carbuncle or Anthrax in Greek hath many Pustles, smal like burnings very hot, called thence *Persian Fire*, with a black Crust like a Cole, and thence called *Carbo* or live Cole, because of the redness round about, under which after suppuration there is no matter but a blak Lump of Flesh fastned to the Roots, with a Feaver and great weakness. Like this is the Anthrax of the back between the shoulders, with many Pustles together red, which broken, there comes matter forth, as from a spunge which turns to a hollow Ulcer, over all the upper part of the Back, with lumps: This I saw in the year 1530.

Carbuncle, Anthrax in Greek or Persian Fire.

There is another Anthrax or Carbuncle pestilential, as we shewed in pestilential Feavers, with one or more Pustles like *Phlyctænæ* or *Clavus* red round about, afterwards blew, green, or black, ending in a black Crust, and a lump like flesh like the former. The pain is not in this so great as in the former, at first there is itching and a little burning, and after corruption, the skin and flesh mortifie as I have often observed, and there is no feeling, and at length it falls from the found flesh, and leaves a hollow Ulcer. There is sometimes a *Bubo* with it, near to the part, as we shewed in pestilential Feavers, where we shewed also that a Pustle came at the beginning of the Carbuncle, without a Feaver from the Contagion, and presently vanisheth.

The pestilential Anthrax.

The Diseases with Ulceration by which with *Hippocrates*, we understand all Solution of Continuity, are so in the Superficies, dividing and hurting the skin, as a Cleft, Excoriation, or Burning; others are deep in the flesh, as a Wound or Ulcers: Of which in order.

Ulcers in the Superficies of the Body.

A Cleft or Fissure or Chinke in the skin, is more or less gaping, according to the deepness thereof. They are chiefly in the Palms of the Hands, and Fingers, and Soles of the Feet: And if they be in the thick skin, the Lips are hard and swollen, they are also in the Mouth, Fundament, and Womens Privities, and Nipples, and in the Præpuce, and Eye-brows, and in the Tongue: As we shewed in the inward Diseases of the Mouth.

Clefts and Fissures called Rhagæ.

There is another kind of Chapps or Clefts which are high, by reason of the thick skin, with hard Lips, and end in perverse Ulcers, it is called *Pernio* or *Chimetlon*, it comes from great Cold in the thick skin of the

Pernio or Chimetlon.

Soles of the Feet, especially in the Heel; sometimes in the Palms of the Hands, and Nostrils, and Ears, as shall be shewed in the Causes.

Excoriation or Intertrigo. Excoriation, Abrasion, or Attrition, is called *Intertrigo*, when the superficial part of the skin is separated from the quick, with pain when it is touched. It differs from a Wound, because that is deeper, it is from divers internal and external Causes, especially from Riding, when men are galled; or from long keeping in bed; and in Children from piss, and the mattery Pustles in the Privities, are Excoriations which itch so grievously.

When the scarse skin only comes off, and the true skin is not bare, it causeth no pain, but falls off like Bran, and is called *Furfur* or Scales, as in the Palm of the Hand.

Burning. Ustion or Burning is when the scarse skin, or skin, or flesh also is hurt by actual or potential Heat. And it differs chiefly, in that some is more superficial; others deeper, raising a Blyster, and then there is pain, or burning the true skin, and making a Crust or Eschar, after which is an Ulcer: Or the skin and flesh also are burned and consumed. And then the pain is greater with Inflammation sometimes and Suppuration, leaving a great Ulcer.

Wounds in the Superficies of the Body. A Wound is the Solution of continuity in the Body, from an outward Cause, it is simple or Compound.

Plaga or Cut. A simple Wound not accompanyed or changed into another, is by a Cut, it is greater or less, even or uneven, or deeper. A wound by

Puncture. a stab is a Puncture or prick, it is

Gun-shot. with a great or little Orifice. Gun-shot is of a sudden, with great or small Orifice, deep, dividing, unequal, bruising and breaking the parts, and sometimes taking off.

All these may be in divers parts, and wound the Skin, Flesh, Membranes, Nerves, Vessels, and Bones, making lame, and reaching inward to the Brain, Lungs, Heart, Stomach, Guts, Bladder, Liver, Spleen, &c. and cause divers Accidents following.

In all three kinds of Wounds there is bleeing first, large if it be great, or where the Veins are large, or in the Arteries, but little when small, or in the little Vessels, or a narrow prick, through which sometimes, little or no Blood can come. And when the Puncture is large, it may also come to pass that no blood may come forth, because it all falls inward.

When bleeding is stopt, there is Sanies, or Blood, and Matter, and then it grows foul after, like an Ulcer, into which it turns, as we shall shew.

Somtimes other Matter comes forth of a Wound, as Meat and Drink, when the stomach is hurt, and Excrements, when the Guts are wounded, or Urin, when the Bladder is wounded, or some part of the Body comes forth, as the Brain, Lungs, Liver, Spleen, Guts.

There is pain in all more or less, and the greater as the part is more sensible.

The part sometimes swells without Inflammation, or withers, or is otherwise deformed or lame.

And the Functions are hurt, as when there are Convulsions, Resolutions, Cramps, and Contractions, from Wounds, and when the inward parts are hurt, they are worse.

A contused Wound. A Contusion is from a stroak or fall, not only with a Tumor, but without, and with pain only, as we shewed in Tumors, and is with a wound, in which the skin and subject parts are more or less unequal, bruised, and cut, with little or no bleeding, and a tumor round about, and colour'd as a Contusion with a Tumor only, and it is more easily suppurated, and turned to an Ulcer.

There are also Wounds partly bruised, partly cut and pricked; these are when the edge is blunt, or from a bite when the wounds are many and deep, according to the length of the Teeth, and the flesh bruised by the broad Teeth: These are easily inflamed, and turn to perverse Ulcers.

Uneven Cuts. There are also uneven wounds with Saws and Instruments, which cause perverse, and sometimes incurable Ulcers.

A Wound with a Phlegmon. There are also Compound Wounds, as when there is an Inflammation with a wound, then it is called a Wound with a *Phlegmon*: This is oftnest from a Puncture or Gun-shot. And there is then a Tumor with an Ulcer and new pain, and it may gangræne.

A Wound ulcerating. When a Wound grows foul with matter or humors, it changeth its Nature, and is an Ulcer.

A Wound with a Fracture or bone-hurt. And the Ulcer is Compound when the wound is is with a broken bone.

Poysoned wounds. Others are venemous from a poysoned Sword or Bullet, or from biting of Beasts, as a mad Dog or Serpents, and then there are great accidents and dangerous. Also men fasting, especially if they be cholerick, or come from fury, are venemous, if they bite.

Stinging. To these may be referred the stinging of Bees, Wasps, and Spiders, in which though there is no wound, yet there is pain, redness, and swelling, especially if the Breast be venemous, as the Phanlangius Scorpion.

Ulcers in the Superficies of the body. An Ulcer is the foul solution of continuity, that divides the skin and flesh also, this comes not at first as a wound from an external Cause, but from a Pustle, or Tumor, or a Wound, or of it self. We spake of Ulcers, with Tumors or Pustles, in Cancer, Carbuncle, Herpes, and Scab. Here we shall speak of Ulcers after Inflammation and Impostlumes, broken with matter or flesh, or after an Erysipelas, when the Blysters are broken: Or of such as come from foul Wounds or Humors. They are all simple or Compound.

Simple sordid Ulcers plain and cavous. A simple Ulcer is when there is onely foulness, when it is not hollow, it is called a plain Ulcer, when there is hollowness from lost Flesh, as when it follows an Impostlume, and is round, it is called a cavous Ulcer. If it be long, or like a Burrough or Channel coming forth, it is called *sinuous*; and if the passage go strait, a fistulated Ulcer. All have filthy matter, but the hollow most; it is white of a mean consistance, called concocted, sweet, and equal: Or discoloured, waterish, or crude, unequal, or stinking. There are also thick slimy Matter about Ulcers and Wetness. The pain is not so great in them as in Inflammations or Impostlumes breeding, only it is lancing and increased with touching or tenting. And if Ulcers be in the parts ordained for motion or go to the Bowels, they hurt the Functions.

A sinuous Ulcer.

Compound ulcers. Compound Ulcers are divers, especially that with proud Flesh which would be ill cured, if before it be removed.

Growing ulcers without flesh. Other Ulcers are sinuous and girt about with a Tunicle within, sending forth no humor from the flesh which is not naked, and cannot be cured till the Cavity be filled with flesh. They are

Fistula. called *Fistulaes*, especially if they be large and strait; as I have seen one that began at the neck and went down the Back to the Hip, voiding much matter. And I have seen many little Fistulaes in the Perinæum that when to the Bladder, through which the Urin alwayes dropt. And I saw in my Fathers dayes in a Palatinate Begger a horrid Fistula in the lower Belly, with ma-

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ny holes that ſent forth matter like ſeed. And 1652. I ſaw a Woman with a Fiſtula in her Privities and ſtrait gut, with a Tumor and many Holes, who went to a ſimple bragging Chirurgion who by Cauſticks cauſed Inflammation and Death.

Callous ulcers. There are alſo Ulcers with hard Lips called *Callous*, and cannot be cicatrized or healed, theſe are called *Dyſepulota*. And they which are malignant ſhal be ſpoken of hereafter.

Ulcers of evil Habit. There are other to be cured called *Cacoethe*, not of themſelves, but by reaſon of the part to which they cannot be fixed as a corrupt or rotten Bone, as we ſhal ſhew there.

Phlegmonous Ulcers. They are worſe when there is Inflammation or Eryſipelas, with Redneſs, Tumor and Pain, if the tumor be an Oedema, it ſwells with leſs pain, but is harder to be cured.

Eryſipelated oedematous Ulcers. The corrupt Ulcers whoſe fleſh is white like Bacon are worſt, and when it is ſoft and ſwollen, and when clear water comes forth.

Corrupt Ulcers with water. Theſe Ulcers come from wounds in the Joynts, where it is membranous and nervous without Fleſh. The German Chirugions call them *Glidwaſſer* or water of the Joynts, and fear leaſt it gangræne, by reaſon of the pain, Contraction, and Corruption.

Paronychia ulcerated. Of this ſort is *Paranychia* or the Inflammation in the Fingers end that corrupteth the Joynt, as we ſhewed in Inflammations.

Foul ulcers. To theſe are referred Ulcers with ſtinking Fleſh, and ſuch as corrode when the Fleſh is yellow, green, or black, with ſtinking Matter, and Worms, called *Verminous*; theſe ſomtimes gangræne.

A verminous ulcer.

Perverſe ulcers. Beſides theſe, there are Ulcers from malignant Humors or other Ulcers, or from Eryſipelas ulcerated; theſe eat and are hollow called *Nomæ*, and when they eat the ſkin only *Phagedænica*, and becauſe they ſpred *Serpentia* or creeping, when they are hard to cure, they are called *Cacoethe*.

Eating Ulcers.

Nomæ.

Phagadænica

Perverſe Ulcers in the Leggs. Theſe are in divers parts, but eſpecially in the Leggs, which are apt to receive Humors and Eryſipelas, above the Ankle, they uſe to be broad there, and to eat the fleſh away. This may be laſting for many years in old men full of Humors, which wets mens clouts, and bleeds upon the leaſt occaſion, and is full of pain, with Heat, Redneſs, and Tumor round about, and ſomtimes with an œdematous Swelling. Somtimes the Vein upon the Ulcer is ſwollen and blew, which comes thither, with many windings in the Leggs, and feeds it: this is called a *varicous Ulcer* from *Varix*, a Vein dilated.

A varicous ulcer.

A malignant pockie Ulcer. Eating Ulcers that are malignant from the French Pox, beſides thoſe in the Jawes, Noſtrils, and Privities of Women, are in the Præpuce and Glans of Mens Privities alſo, which deſtroy the Yard: this is called *Cancer*. And

A Cancer in the Yard.

Leprous Ulcers. that is a leprous Ulcer, which is in Elephantiaſis, in the Jawes, Noſe, Soles of the Feet, and Palm of the Hand and Arm-pits, and other parts of the Arms and Feet, which are Phagadænous that is devouring, and have ſwollen hard Lips without pain, as we ſhall ſhew in Elephantiaſis.

Corruption in the ſuperficies of the body Corruption in the Superficies is either in the Fleſh or in the Bone.

Gangræne. Corruption in the Skin, Fleſh, Membranes, Nerves, and Compound Veſſels is called a *Gangræn*, uſually it follows Inflammations, ſomtimes it comes from other cauſes. In this the part begins to loſe its natural color and wax blew ſuddenly, or by degrees and then black, with ſwelling of the part and pain very great before a total corruption from which poyſon conſtantly flows, that wets the skin and fleſh and makes it ſofter, which being corrupted, either opens of its ſelf and ulcerates, or with Scarification, by which we labor to cure. The wounds lye deep and ſwell with lips, and at laſt, if it be not prevented, the part is deſtitute of all natural heat, pulſe and ſenſe, and is very ſtinking and hollow. And then it is called *Sphacelus* and *Syderation*.

Sphacelus, Syderation.

Corrupt bones Caries. If there be foulneſs of bones, they are either corroded in parts and made rough and uneven, or corruption is ſo manifeſt that the part is black and comes from the ſound and quick part, or corrupts the whol bone, as in *Paronychia*, the joynts of the Fingers and mortifyeth, and is called the *Caries* of the bone. This corruption of the bones is with an Ulcer in the skin and fleſh, from which it cometh for the moſt part and through which it is to be ſeen, being deep and to the bone. And therefore though of it ſelf, a corrupt bone feel no pain, yet the Ulcer joyned thereto and which cannot be cured whiles the bone is foul, may be painful. Of which as the ſhape is divers, we ſhall ſpeak in Deformity.

The Cauſes.

The Cauſes of all pains in the ſuperficies of the Body. (as tickling, itching pains of cold or heat, compreſſions, roughneſs, contuſion, all without an appearent Character alſo of redneſs or *Eryſipelum*, Tumors, Inflammations, Impoſtumes, Cancers, Puſtles, Scabs, Cleſts, Corroſions, Wounds and Ulcers, in which there are ſigns, which are the diſeaſe it ſelf) are cold, or hot, or dry diſtemper of blood, or other Humor gathered in thoſe parts, or Solution of continuity.

Want of uſual touching cauſeth tickling. When the parts are not uſed to be touched, as the ſoals of the Feet, ſides, Arm-holes and Privities, they are ſubject to tickliſhneſs, or when any thing toucheth the Face gently, or creepeth, there is tickling, or titillation.

Cold cauſeth pain. A cold diſtemper, cauſeth the cold pain in the ſuperficies of the Body, from Air, Wind, or Water, or Snow, or Ice, and not ſolution of continuity, by freeſing that preſſeth forth, the thin moiſture. This pain is greater, when the part is Nervous, or not uſed to cold, or Air. Therefore the Face, becauſe it is not covered, though it be very ſenſible, yet it is not ſo ſenſible of cold as other parts, that are uſualy covered. Alſo cold is very grievous to Ulcers or wounds that have the skin off. And this pain is greateſt, when there is a ſudden change from very hot to very cold. If this happen to the Hands as it is uſual, there is that great pain in the the Fingers ends, called in high Dutch *Kumeglen*.

Heat cauſeth pain. A hot diſtemper cauſeth a hot pain, from the Air, made hot by the Sun or otherwiſe, or from water, or the like, when there is burning in the body and not Inflammation. Alſo this hot pain may come from too many cloths, which diſturb and cauſe ſweat. Alſo the body is inflamed with excerciſe. And there may be preternatural heat in the Hands and Feet, from internal cauſes, which ſome attribute to the heat of the Liver. Alſo in hot diſeaſes, eſpecially Feavers, there is a perplexing heat internal and external.

Dryneſs is the cauſe of pain from touching of rough things. Dryneſs of the skin cauſeth that roughneſs, which offendeth the touch, in tender people eſpecially. This roughneſs may alſo come from external

Air

Air that is dry, or from the touching of dry and astringent things. When the skin is made hard by labor, it rather diminisheth the sense of touching, then depraveth it. Somtimes the skin is extraordinarily cleft; as in the Hands, Feet, Lips, Fundament, &c. This dryness may come from the causes mentioned, or from cold or heat, as in Feavers we find the skin cleft and the Lips, from the heat of breath. And there may be clefts in the Hands and Feet, from cold Air and water. And in extraordinary cold that is long, when it beats upon a part where the skin is thick, there may be great clefts, which turn to Ulcers, they are called *Perniones*. As in the soals of the Feet and Palms of the Hands and in the Ears and Nostrils, because they want flesh to defend them. This the cold doth by astringing, drying and wrinkling the Skin. And if it extinguish the heat, it is most dangerous.

Dryness is the cause of clefts.

Blood flowing to any superficial parts, as to the Skin, Flesh and Glandules, causeth divers diseases; When it doth not only moisten the parts, which is natural for nourishment, but fil and inflame them. And if blood flow to the skin, except the scarf skin which admits no blood, it causeth Erysipelas, in which there is redness from the blood, shining through the scarse skin: and before it is fixed or swollen, the part being pressed the redness flies away and returnes again, as we see in other parts, it comes to pass from the blood coming and going in the Cheeks. But if the blood be hot, the burning is the worst pain, and it is as the blood is. For if it be thin and hot, there is a simple Erysipelas which comes and goes sooner. If it be thick, there is a great Erysipelas Phlegmon, if waterish, there is Erysipelas œdematous: this is gentler but longer. If the blood be Cholerick, the Erysipelas turns yellow, and burns more, and eats off the scarf skin. If the choller be green or black it is seen by the color and ends in perverse Ulcers, or malignant if it be infectious.

Blood flowing to the skin is the cause of Erysipelas and its kinds.

If the blood be gathered in the flesh and skin, it causeth swelling and Inflammation with redness and pain from distention and heat, and when the blood is discussed the Tumor is gone. If it suppurate or grow ripe, it is an Impostume, which breaking makes an Ulcer, and the matter is more, when the blood is much and the substance of the part corrupted. And if the Inflammation increase and the humor be perverse, and corruption follow, especially a wound in the Nerves, that pernicious Ulcer, called in high Dutch *Slidwasser*, which gleets with Water is begotten, and the Nerves being corrupted, there is less of motion. But if the Inflammation increase and there comes no suppuration, but corruption of the natural heat be extinct, a *Sphacel*.

Flux of blood to the skin and flesh, causeth Tumors and Inflammations.

Suppuration, causeth Impostumes.

Slidwasser, from a corrupt wound.

Corruption of the part, causeth Gangren.

Natural heat extinct, causeth a Sphacel.

If blood flow upon the flesh rather then the skin, as upon the Muscles outward in the belly, breast, neck or back there are Inflammations, but not red or manifestly swollen, as in other, as in the Pleurisie and Quinsies. If the blood flow to divers places there will be pustles, as I shewed. And if it be in the pores, there will be many little scabs.

These Inflammations are divers in respect of the blood, if it be pure, the Inflammation is simple. If thin and not only gathered, but dispersed partly upon the skin, it causeth a Phlegmon with Erysipelas, if thick the Inflammation will be blewer called a Scirrhus, which rather follows, then accompanyeth an Inflammation. If the blood be waterish, the Phlegmon wil be Ædematous, in which the Serum sent further into the skin, makes an *Ædematous* tumor about: as we see blood doth, when sprinkled upon linnen. If other humors, as choller, yellow, green or black, or sharp and malignant, be in the blood, the Inflammation is worse, and the heat of the blood, when the Inflammation lyeth deep, will make the rotten flesh part from the sound, in a Coate which will be in the tumor, when opened, as in furunculus,

If Blood flow upon other parts distinct from the flesh and skin, and gathereth together, it causeth a hot tumor and inflammation: as when it fals upon the kernels or glandules in the Emunctuaries. This is usual because nature sooner dischargeth her self in ignoble parts, especially being spungy and placed by the divisions of the great veins. Hence comes the pain and hot tumor in Bubo and Parotis behind the Ear, and Inflammation and suppuration in *Phygethlon* or *Panus*: as we shewed. These differ as the blood is pure or impure, thin or thick, crude, simple, or mixed, with other crude humor or waterish, from whence come *Phyma*, or with pernitious and infectious humors, from whence comes the Pestilent and Pocky Bubo.

Flux of blood upon the glandules, causeth the Bubo, Parotis, Phygethlon, Phyma.

If Blood flow into other parts, as into the breasts or stones, into which it easily floweth, by reason of the plenty of Veins, or into the spungy parts, as the Privities, Fundament and Mouth, or into parts that have grisles, as the Nose and Ears, or into the joynts: it causeth hot tumors and Inflammations in them, which differ as the blood is pure or impure, and as the parts are more tender, nervous and sensible.

Flux of blood into other parts, causeth Tumor and inflammations in them.

The efficient cause of blood thus flowing into the superficial parts, is the expulsive faculty, when it is troubled with it, either offending in quantity or quality. The helping cause, is the disposition of the blood being apt to flow, and the readiness of the parts to receive it. These causes whether one or more come from these following.

As Plethory or abundance of blood, which is burthensome to nature, and therefore sent by her, both to inward and to outward parts. Somtimes it flows of it self and somtimes from some light cause. Therefore young people that grow, have swollen or waxing kernels, from abundance of blood; and by handling, they break into *Buboes*. Or when the blood is too hot or thin, it is apt to flow, and being much it stirs up the expulsive faculty to send it forth, and then it causeth Erysipelas or divers Inflammations, according to its nature. So in a Synock Fevers, Erysipelas, as comes from hot blood sent from the Veins into the skin.

Also another humor or quality offensive to nature, may provoke her to send out blood, while she expels the humor: and thence tumors may be. So when the cause of the disease is sent from the Veins with the blood in the Crisis of a Fever: there is a tumor in the declination of the disease. And when the Pestilent quality is sent to the Emunctuaries with the blood in a Pestilent Fever, there is a Bubo Pestilent: and when the poyson of the Pox is sent to the Groyn, there is a Venereal Bubo: as we shewed.

Pain causeth Tumors and Inflammation, (not by attraction, as it is usually thought) but by stirring up nature to expel the cause, by which means the blood floweth: this is in the outward parts, when they are pressed, strook or bruised, by which is pain. Or if pain come from any disease, and if the Inflammation be increased a new by the pain, if there be Impostume, Pustle, Wound, burn Ulcer or Inflammation therewith, or with any other dis-

Pain is the cause of divers Tumors and Inflammations.

ease

ease causing this pain. Also Pustles inflamed from scratching come from pain which follows, though at the first it seems pleasant. Also it often comes to pass, that not only the part pained swelleth, but the adjacent parts if they be apt to receive Defluxions, as the Kernels in the Groins, Arm-pits, and behind the Ears, when there is any pain from the Causes or Diseases mentioned. And a troublesom Scab in these parts, hath commonly a Bubo accompanying it. And the pestilential Bubo comes as I shewed, not so much from the Plague, as from the burning and pain of the Carbuncle near it.

Also these Pains are longer and worse, when the blood easily and constantly flows thither, and the part is continually pained. As when there are swell'd Leggs in a Dropsie, if the skin be open, there is a constant Flux of water which by its corruption through long abiding in the Body, is pernicious and corroding; And also of blood being thin, which causeth the perverse and ulcerated Erysipelas which so easily gangrænes.

External Heat causeth Erysipelas, or Phlegmon, and their kinds.

When outward heat doth long or much afflict the skin, it doth not only make it thin, but inflames it, and the blood near to it, and makes it flow, causing Erysipelas or Inflammations, especially in tender and sanguine Constitutions, and such as are subject thereto. As when they sit too long by the fire and burn their Shins, or inflame themselves by long suning. As I did by riding in a hot day when I was young, my Boots were so hot that they made my Leggs burn, and look red two dayes after. This I have had often, and it came at first with red Spots, which turned first blew, after yellow, and then vanished. They may also come from hot water, and after bathing, as the pustles called in high Dutch *Eyssen*, when in the time of the Bodies being hot, they use cold water, which causeth a sudden repercussion, so that the Blood flies back suddenly and returns with pain. Also other moderate heat may cause Itch, and that scratching, and so pustles. Also Inflammation of particular parts may cause them, as of the Roots of the Nails. Then they are called *Paronychiæ*, as when Maids by washing their Hands in foul hot water often, do cause their Nails to be crooked, and the Roots inflamed.

Flux of Humors causeth pustles.

Also other excrementitious and preternatural Humors thrown to the skin, and there fixed cause pustles, as blood dispersed into divers parts, and these may grow greater, and turn into Ulcers, small or great, or corroding, or venemous, as the quality is.

Humors that have an occult quality that is malignant, produce a little swelling or pustle, according to their Venom.

A pernicious and venemous quality, causeth the Cancer.

A venemous Humor so infecteth the parts, that somtimes at first there is a little Tumor which only causeth a little pricking, but is most dangerous, in that it will not away; because while it is nourished with the other parts of the Body, it makes the Nourishment like unto it self, and converts it into Venom, and so increaseth by degrees, and grows broader and deeper, and at length becomes a Cancer, consisting of a fleshy substance full of Veins, with no Inflammation or Tumor, but Blood in the Veins, which itcheth and pricketh, which shews its malignity by its constant increase, till there is an Ulcer, and then it goes no further but with its Claws that come from the Body it creeps on, we know the whole to be malignant, because if it be not taken out by the Root, it cannot be cured, and the least portion remaining will grow again.

It is a hard thing to know whence this Matter and Poyson first comes, or to describe the Nature of it but by the effect. But that it came by Touch and Infection, because the Elephantiasis whose Cause is the same with that of the Cancer, and therefore is called the general Cancer comes from Contagion, but the Cancer is worst, because the Humors are all in one place. And as there are few that have Cancers, so are there few Lepers, for the Venom lyeth lurking in the Veins, and comes to the part infected with the Blood, and when the Cancer increaseth, it weakneth the Body by degrees. And this may be an argument, that there is a Contagion in the breeding of a Cancer, because I knew two Women that attended upon two other that had Cancers a long time in their Breasts, that consumed them which were themselves infected with Cancers, and perished therby after long torment, the one being near of kin to her Mistris. But we cannot yeeld that it comes from Melancholy, for these reasons: For if it comes from Natural Melancholy, which they say is the Dreggs of the Blood, there would some signs thereof appear, and such blood would be there gathered out of the Vessels, if there shoul d be a Tumor or Inflammation, which are not. And if it come from preternatural Melancholy, there would be at the first coming a burning, corroding, and blackness, as in the Carbuncle which is not so, but a Cancer is like Flesh, and not very painful.

A pestilent Poyson causeth Carbuncle and pestilent Bubo.

A pestilent Pustle comes from poyson of another Nature, which we call a *Carbuncle*, with venemous force, and with little burning, but with itching and pricking, only as I said of a Cancer; somtimes with Inflammation round about, and a Bubo hard by, which corrupteth the part, and mollifieth till it falls out back from the sound.

This poyson comes from that pestilent Poyson that got into the Body, and caused a pestilent Feaver by its destructive quality and heat, as I shewed when it gets outward. And we shewed in pestilential Feavers, that I and others have been infected with pestilent Pustles taken outwardly.

Cholerick, salt, and sharp Humors cause the Scab, and creeping Itch, Carbuncles, and Phlyctenæ

Some Humors cause Scabs, Itch, and Carbuncles, by a manifest quality that corrodes and burns, and Pustles with Ulcers; these are either preternatural, yellow, and green, and black Choler, or salt, sharp, or malignant, and go the Superficies of the Body, with the blood and serum, and cause pustles and inflammations, if they come with blood or pain; or they come without this Flux from the Veins by sweat, according to the diversity of these Humors, are different Scabs, Itch, and Carbuncles, as we shall shew.

If in the common moist Scab, there be Itch and corroding without great burning, the Humor is not so hot but salt, and gentle Choler, or tempered with water, is fallen from the Veins upon the skin, when there is no redness or Inflammation: But if there be, they shew it come with blood moved by scratching or pain, as also may appear by the suppuration that follows. When those things are as in the worst Scab, with yellow or green Matter, it comes from thicker and worse Choler, as the colour shews, as in *Terminthis* and *Epinyctis*, the pustles are very burning, with Inflammation and Suppuration following. Especially in a Carbuncle are the pustles very burning, which shews that they come from very hot Choler, and the Feaver shews they come from Blood, and their sudden appearing shews that they come from Defluxion. And we cannot gather that black Choler was the Cause, by their blackness, because others are black when they are dry. But from the great Heat that burns and corrupts the skin, and makes it black, and will not let them suppurate, we may conclude that either black Choler or green was the cause.

This shews that the pustles in Herpes come not from a Flux of Humors, but from a Collection made there, because they come by degrees without Inflamation. And if the Herpes be called *Miliaris*, there is great Heat and Pustles dry, and therefore the Choler was yellow, milder, and thinner, and went to the Superficies of the skin. If it be *Herpes Esthiomenus* the Choler is worse and green, and

it is deeper in the Fleſh. The malignity appears by its corroding and creeping on, and when it creepethno farther, it cauſeth *Impetigo*.

In that kind of dry Scab which is called the Itch, becauſe no moiſture appears, we conclude that the Choler is pure, but thinner then in Herpes miliaris: Or that the Humor is ſalt and dryed, the skin ſhews which grows red by ſcratching. And the like Humor is in Impetigo, deeper and broader. This by continuance turns worſe, and cauſeth *Pſora*, which cometh from ſalt water that is infectious and corroding, as appears by the conſtant ſweat, which vaporing away, wet not but rather dry the skin. This Venom may come from a long continuing Scab, which infecteth the skin when it turneth the Nouriſhment into corrupt Humors; this is the worſe ſort of Scab called the Greek Leproſie or Arabian Leproſie, which cannot be cured by reaſon of the fault in aſſimulation or nouriſhment.

As for Phlyctænæ, it is plain that they come from water carried under the ſcarſe skin, which divides it from the true skin and maketh Blyſters, becauſe water comes forth when they break. If this water be pure, there is no pain while they are whole but when they break, and the true skin is hurt.

But if the water be ſalt as appears by itching, or mixed with Choler, as appears by the yellowneſs, when they open, the heat is greater; and if this Humor ſweat forth long, they creep, and then it is called *Herpes phlyctænodes*.

Theſe ſalt, ſharp, cholerick Humors which cauſe the Herpes and Carbuncles, come from Diet when it is apt to breed ſuch or turn into Choler, as we ſhewed in Feavers. For if in the firſt or ſecond Concoction they are not ſeparated from the Blood, but lye long in the Meſeraicks, they grow worſe, and either get into the hollow Vein, with the Blood and Serum, and ſo to the Superficies of the Body, or there they are heaped up. Therefore intemperate Livers, and ſuch as uſe bad Diet, and are Chacochymical, are ſubject to theſe. Alſo the ſame Excrements may be gathered from Diſtemper of the Bowels, or be derived from the Parents: And ſome think they come from the menſtrual blood. And they go to the skin by Natures benefit, which expels them when they are bound, and by other Cauſes, as heat and motion. As we ſhewed ſpeaking of Tumors from Blood.

Solution of Continuity cauſeth divers kinds of pains in the Superficies of the Body, with Ulcers, as Excoriations, and Wounds, and Clefts, or without Ulcers; as the cauſe was internal or external.

Compreſſion, Diſtenſion, and Contuſion cauſe pain.

The external Cauſes of Solution of Continuity, are Compreſſion, Diſtenſion, or Contuſion, with outward hurt, but inward ſeparation of the ſmal Veins which cauſeth pain, which we call Diſtention or ſtretching, as from a ſtroak or weight or pulling the Hair: Hence comes the Rhagades or Clefts in the Fundament from hard Excrements.

Friction is the cauſe of Scabs.

When the skin is ſcratched off there is Intertrigo or Rawneſs, this comes after riding as galling, or long Diſeaſes and lying, and from ſcratching with the Nails. And the moiſt Itch is when the skin is moſt ſcratching, and Humors that are ſalt or cholerick come forth, and it is worſe when there are little Tumors from rubbing and they break. Intertrigo or Puſtles of the Privities come ſo, from cholerick ſweat which putreſieth in theſe parts eaſily, and cauſeth itching.

Outward Cuts, Pricks, Contuſions, cauſe Wounds.

Of poyſoned Wounds.

Cuts, Pricks, Stroaks, cauſe Wounds, all theſe when they ſuppurate are ulcers. Theſe are with a ſharp or blunt Tool. If the Inſtrument be infected with poyſon, the Wounds will be venemous, or ruſty, or if the weapon be toucht with Garlick, or a bullet dipt in greaſe, or if a ſword or tool be otherwiſe poyſoned, the wound will be venemous.

Corroſion of the skin.

Taking off the skin by Medicines or the like, ulcerateth and inflameth, and alſo ſharp Urin doth the ſame in Childrens Hips.

Of Burning.

Burning ſeparates the ſcarſe skin from the true skin, and cauſeth a bladder or blyſter, which breaketh and leaves the skin bare; when it is deeper it cauſeth an Ulcer or Eſchar. This may be from heat of the Sun, which blyſters the naked Body, or from hot or ſclading Oyl and Water which takes off the skin, inflames and brings perverſe Ulcers; or from Fire which makes Blyſters and Ulcers; or from burning Medicines, Veſicatories and Cauteries, among which ſome mortifie, and cauſe an Eſchar without pain. Alſo a Nettle ſends in fire with its prickles, which cauſeth firſt Heat, then Blyſters.

Biting or ſtinging of venemous beaſts.

Biting of beaſts cauſeth uneven and deep wounds, which ſuppurate and turn to ulcers; and theſe are worſe when the ſpittle is venemous, as in ſome beaſts. And it is known that the biting of a man hath cauſed dangerous wounds by his ſpittle, eſpecially when he hath been faſting and angry, becauſe the ſpittle is moſt cholerick, as appears by the ſame. I knew a Fiſher-mans Wife that was bitten by her angry Husband in her right hand, and dyed of a venemous Ulcer cauſed thereby with a Feaver. And I knew two more that lay long ſick, and were with great difficulty recovered of Feavers, by bites given by their fellow-drunkards in their fingers. There is from biting of a mad Dog or other Beaſt, not only a venemous wound, but other horrid ſymptoms: As we ſhewed in Hydrophos. Alſo if the bite be very ſmall, if the Venom of the ſpittle get in, as of a Weezle or Mouſe, there may be a perverſe wound, or of a Viper or Serpent, or the like, the whole Body is poyſoned.

The ſtinging of beaſts cauſeth venemous wounds.

When beaſts by their ſtings or otherwiſe make wounds, though ſolution of Continuity ſcarſe appear, yet becauſe there is a burning or evil quality ſent into the part, there is a great pain, inflammation, and tumor; as we ſee in ſtinging of Bees or Waſpes, when they leave their horny ſtinges in the wounds: If they come from worſe Creatures, as from the crooked ſtinge of a Scorpion, then the poyſon infects the whole Body. And as *Nicander* and *Dioſcorides* ſhew the ſame may be from divers other venemous beaſts, whereby the Body being only prickt in one part, may ſuffer in divers. Theſe we ſhall not ſpeak of, becauſe they are not troubleſom in our Countrys: As alſo we ſhal not ſpeak of the Harms, ſtinging of Flies, Gnats, and Fleas, which are only itching, with a red ſpot.

The Humors which cauſe ulcers that follow Impoſthumes, and are joyned with puſtles.

The internal Cauſes of theſe Solutions of Continuity, are Humors which while they cauſe tumors and puſtles, do alſo corrode and ulcerate: Or thoſe Tumors ulcerate, and cauſe it as we ſhewed. Namely how matter bred of Inflammations ſuppurated, produceth Impoſthumes and then Ulcers, which with other Humors coming to them, grow worſe, as by blood inflamed, or by other malignant Humors, malignant. And alſo how from this pernicious Matter breeding a Cancer, it may be ulcerated, and how a hollow Ulcer may follow the burnt and corrupt Fleſh, that falls out of the peſtilential Carbuncle. And how from cholerick Serum and ſharp Humors that produce Carbuncles, Herpes, and Scabs of all ſorts, there may ariſe malignant Ulcers, as in Carbuncle, and corroding as in Herpes, and foul with Matter as in the moiſt Scab, and dry with Clefts, as in the dry Scab: And alſo how the skin comes off from the Serum that cauſeth Phlyctenæ.

Humors cauſe Fiſſures or Clefts

Alſo without Puſtles or Tumors going before, the skin may be cleft by a ſharp, ſalt, drying Humor, when the part is tender or ſpungie as the Lips,

Funda-

Fundament and Privites. Hence come the *Rhagades* or clefts, which by reason of the exquisite sense of those parts are very painful and burning.

Humors that cause Tinea Favus or scald Head.

When a thick Salt humor is gathered between the thick skin of the Head and the Skul, and there long kept till it putrefie about the roots of the Hairs, and eates through the skin in divers places, there is a *Tinea, Favus* or scald Head. And the Humor is Malignant, because it is infectious in Children.

Humors that cause Corroding and Varicous Ulcers.

Corroding *Phagadænical* Ulcers breed and are nourished with sharp and malignant waterish Humors. Which are cheifly in the Legs, by falling down of the Humors. Also these Humors carried with the blood to some Vein near to an Ulcer and enlarging and washing the Ulcer; keep it from healing, as we shewed in a Varicous Ulcer. The Original of these Humors, is as of those that cause *Herpes* and Scabs.

Malignant humors, cause Malignant Ulcers.

When the Privities are infected by Malignant Humors, from unclean Copulation, there are Ulcers, as in the Glans and Præpuce. And the Ulcers in the French Pox and Leprosie are alike. But the nature of these humors are known only by the effect, being infectious.

The Cure.

The Cure of solitary pains which have no Character external but themselves, as itch and tickling, hot and cold pains, or roughness of Skin, because they are not great, nor last long, but depart with the cause removed, is not hard. As thus.

Cure of tickling.

If tickling come of it self it is not long, but if it be by outward force it is a torment intolerable and it weakneth and causeth convulsions, which must be cured.

Cure of itching.

A light Itch will cease of it self, if you be patient and forbear scratching. If it be great, it is cured by a pleasant scrubbing. If it continue or return and the cause be external, as Lice &c. It shall be cured as in them. If it be internal from a humor, because it hath with it commonly scabs or pustles, it shall be spoken of in them. But if it be without other manifest disease in divers parts and continue, use Evacuations, Baths, as in the scab. If it be in Womens Privities, you must put Oyntments or the like into them.

The Cure of pain from cold.

If pain come from cold Air, Wind, Water or Snow, and cease not when they are gone, you must by degrees bring the body to a natural heat, least the sudden change, from extream cold to extream heat, bring inconveniences, or that called in high Dutch *Runeglen* or pain in the Hand. It is good to come into a temperate room, or to exercise violently if the feet be cold from riding, or beat the Arms like Watermen, or to apply skins, furrs or feathers, or put the Hands into the Hair, or wash them in warm water before you come to the fire. If after these the native heat be weakned, use Fomentations, Baths and hot Oyntments, as in astonishment and Palsie, as Oyl of Euphorbium and Peppers: Or take *Pellitory of Spain, Pepper, each two drams; Euphorbium a dram, Oyl of Wall-flowers and Wax and Oyl of Spike and Spices with Musk, Amber and Civet.*

Oyl of Nettles, or wherein Nettles are boyled, is a singular remedy: and to preserve the Hands against cold, and also Goose grease.

The Cure of pain from heat.

If a hot pain come from heat of the Sun, or motion, or baths and cease not, the cause being removed, you must not sudenly cool which is dangerous, as we have known some who in violent heats have staied long in Cellars under ground and caught Feavers and dangerous Desluxions and Apoplexies. Therefore it is best to go first into some temperate place or Arbor. If the heat continue to Inflammation or Synoch, Cure that. If it be in the palms of the Hands or soals of the Feet, because it comes from internal causes and foreshewth or accompanyeth diseases, Cure them.

The Cure of pain from touching of rough things.

If there be roughnes or hardnes of the Skin, which hinders and troubles touching in dainty people, use moistners, as in Deformity. If there be clefts see Ulcers.

The Cure of pain from compression and distension.

If there be pain from pressing or stretching without manifest solution of continuity, it ceaseth with it, but if you fear Tumor or Inflammation, we shew you how to prevent them in a Phlegmon.

The Cure of pains in the superficies, that have manifest diseases, is as Erysipelas, Phlegmon and Tumors from contusion or glandules, or as Impostumes from Inflammation, or as a Cancer, or as Pustles, as Carbuncles, Herpes, Scab, or as Ulcers, or corruption of parts, as Gangreen, or foul bones.

The Cure of Erysipelas and its kinds.

If an Erysipelas be without a Feaver from an external cause, or if the Feaver be little, only Cure the Erysipelas. If a Synoch follow look first to the Feaver, as in Feavers first you must be sure to prevent the Carbuncle, if it be customary, as in old people. And after you must regard the Feaver, if it be not prevented, by sweating, bleeding, purging, altering heat, and other accidents.

But as to Erysipelas as alone, when it burns not much, it must not be over much cooled, but kept warm to disperse it with gentle means, by wrapping it in Linnen that is soft and a little unctious, as some think.

Or wrap it in a Saffron clout: Take *Saffron a dram, Plantane, Privet, Night-shade, Roses, each an ounce; Rose vinegar half an ounce*: let them stand warm till the water is dryed, then dip a clout in it, apply it wet at first and warm. Or apply scarlet, which doth dissolve and strengthen the part.

Or Fume the part with Mastick, Frankincense, Amber, or Juniper or Sanders burnt.

These gentle remedies are most usual, because the patient seareth strong and moist means.

When an Erysipelas with a Phlegmon or alone, is very burning, or hath Pustles or Blisters. Take heed of an Ulcer, which is dangerous, at first stop the Flux of blood from the part allay heat and abate pain, and then by degrees consume and digest the matter.

At first to repel and allay heat, use coolers with a little astringents, by Fomentations. This is approved of others, but ours will not wet the part and think that wet, causeth all accidents. They are deceived from hence, because they hear that a Gangreen comes from a cooled Erysipelas, that suppose it is from moisture. But the Refrigeration in a Gangreen, is rather a Mortification and Extinction of the native heat, from two great Inflammation, then from the introducing of a cold quality.

Therefore cold water with the third part Vinegar, may be used as in Arthritis from blood, with a clout or woolL. *Dioscorides* bids use Vinegar alone with the white of an Egg to allay pain, or Juyces, or distil'd waters of Plants, or Vinegar of Roses.

Apply these Herbs green, bruised, or heated, or boyled, or with Bran and Vinegar, as Plantane, Nightshade, Shep-heard purse, Knot-grass, Purslane, Sorrel, Housleek, Vine leaves, Endive, Lettice, Grundsill or Lens-Palustris, Cotyledon, Liver-wort, Lonchytis, Willow leaves, Alder, Reeds, Privet, Cypress, Myrtle, Bramble, Sumach, Fleabane, flowers of Roses, Violets, Water-lillies, the great Antirrhinum and of Ras-berries.

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Or uſe the juyces with Plantane and Roſe water, as an Epitheme or Vinegar and red Wine, the white of an Egg, Camphire and red Sanders.

Or the Decoction of the five-leaved-Graſs, Plantane, Houſleek, Purſlane, Vine leaves, Privet, Myrtles with Barley: and in the increaſe, Chamomil, Melilot flowers, Roſes, Fenugreek, Oyntment of Roſes, with Camphire and *Galens* cool Oyntment, or that of Houſleek, Oyl of Violets, Gooſegreaſe and Saffron.

Or: Take *Oyl of Roſes two ounces, of Water-lillies or Violets an ounce, juyce of Plantane and Nightſhade, each an ounce and an half; Vinegar of Roſes an ounce, Camphire a dram with the white of an Egg, or Mucilage of Fleabane an ounce and an half, and Turpentine.*

Plates of Lead are good to repel.

When you fear an Ulcer, add dryers to your coolers, as Oyntment of Ceruſs, Album made of Ceruſs, white Wax and Oyl of Roſes with the white of an Egg and Camphire, or with Ceruſe and Oyl boyled, and Lytharge.

Or: Take *Litharge an ounce and half, Ceruſs two drams, juyce of Plantane or Nightſhade two ounces, Vinegar of Roſes half an ounce, Oyl of Roſes two ounces,* mix them well in a Leaden Mortar, dip clouts and apply them, *or with white Wax,* make an Oyntment.

Or thus: Take *the white Troches of Rhaſis two drams, Sarcocol a dram, Lytharge burnt and waſhed Lead, each a dram and an half; Oyl of Roſes two ounces, juyce of Plantane an ounce, white of an Egg and Mucilage of Quince ſeeds an ounce,* add *half a dram of Opium* to abate pain.

Or to allay pain uſe Cowcumbers, Anguria, deadly Nightſhade, Herb true-love cut and bruiſed, or pulp of Caſſia.

Or Henbane leaves or Tobacco, crude or roaſted; Poppy heads, roots of Mandrakes with Bran and Vinegar to repel. *Dioſcorides* uſeth juyce of Hemlock, we uſe juyce of Henbane.

Half a dram of Opium with half as much Saffron, may be added to the former. And this is the cauſe why the Chirurgions uſe Treacle in Oyntments.

Populeon cooleth and eaſeth.

Or thus: Take *Populeon an ounce and an half, Oyl of Henbane, Mandrakes or Poppy ſeeds half an ounce, Mucilage of Fleabane ſeeds an ounce, Saffron a ſcruple,* and a little *Opium.*

Or this Epithem: Take *Milk three ounces, Oyl of Roſes an ounce and an half, white of an Egg or Mucilage of Fleabane ſeed an ounce, Vinegar half an ounce, Opium half a dram, Saffron a ſcruple.*

In the progreſs when the heat abates, to diſſolve, when the part looks not ſo red and is yellowiſh, or at firſt if the heat be little: Uſe Coleworts, Pellitory of the wall, Mallows, white Lillies, Mulleine, alſo leaves of Ricinus, Stratiotes, Acinos, Fetherfew or Parthenium, roots of Alkanet and Lychopſis, and of Clowns-Allheal with the ſquare ſtalk, which is ſo highly commended: bruiſe and apply them.

Or dip clouts in Oyl of Roſes and Wine, and ſqueeze and apply them to eaſe pain and diſcuſs.

Or boyl Oyl and red wine: thus, Take of them equal parts, cover them in a cloſe Veſſel, boyl them gently till they make no noiſe.

It is good to diſcuſs, to anoynt with hot blood, eſpecially menſtrual, as ſaith *Dioſcorides.*

Or with Urin to ſtop itching and to dry. *Dioſcorides* uſeth the Sediments, or ſetling thereof, adding Vinegar and Eggs.

Dioſcorides alſo commends Goats or Sheeps dung boyled in Wine or Vinegar.

Others commend Inke, but it is too ſharp without cold waters or juyces. And I knew an Impoſtor that concealed a Gangreen thereby. *Dioſcorides* uſeth ruſt of Iron and burnt Vitriol, or Chalcitis, or Salt and Vinegar.

Theſe ſtrong Medicines are beſt in ignoble parts, not in the Face and Nerves: when there is need of great drying.

Diſſolve the reſidents with Fomentations and Oyntments, and ſtrengthen the part as we ſhewed in Arthritis, as with Lyes of divers ſorts, and Spaw waters to prevent.

Waſh the Feet with water wherein Vitriol, or Oak, or Ivy leaves, or red Roſes, or Sloes, or Grapes are ſteeped.

Or put them into the Wine preſs, or into Grapes ſtampt with Iron water and Vinegar.

If there be Eryſipelas in the Face, waſh it often with red Wine, Roſe, Plantane and Nightſhade water, and Vinegar.

If the Legs have an *Oedema* after the Eryſipelas, uſe things as in *Oedema,* if it ulcerate or grangreen. See them.

The Cure of divers ſorts of Inflammation.

Phlegmon or Inflammation is of divers kinds, but we ſhall ſpeak only of them, which differ not much. Such as are in the skin, as Phlegmon with Eryſipelas or *Oedema.* Or with little Tumors, or Puſtles that ulcerate and turn to ſcabs. Alſo of Inflammations in ſpungy parts, as Privities, Paps, Fundament, Mouth, and in the Griſtles of the Noſe and Ears. And of thoſe in the joynts and ends of the Fingers called *Paronychia,* preſcribing to all their particular remedies. Of the Tumors and Inflammations of the Glandules, we ſhall ſpeak hereafter, and of the Impoſtume that comes from all Tumors.

Of theſe phlegmons the greateſt and fulleſt of pain are the worſt, and they which are in noble parts, or near to them, as in the Face, Organs of ſenſe, or in very ſenſible parts, as in the Fundament, Yard, or Womb, or in the joynts, or Fingers. Many of theſe Impoſtumate, and then ulcerate, and hurt the noble part, other gangreen and cauſe loſs of parts or deaths. Others turn into a Scirrhus, which hinders the bending of the joynts.

Blood-letting, is the chief remedy againſt all, if there be plethory, both to prevent and cure. Alſo it revels and derives from the part, and helps the Feaver if it be there.

Alſo we revel and derive with Scarifications, Cupping, Ligatures and Friction. And it is good in plethory, when the Terms or Hæmmorrhoids bleed, and to divert.

If the body be foul, looſen the Belly and purge to prevent, eſpecially when people are ſubject to Inflammation. And the Cure will be the eaſier when the body is clean. Alſo ſome Laxatives do revel the blood flowing to the part, they muſt not be ſtrong to ſtir or inflame the Body.

Alſo uſe alterers againſt the phlegmon and Feaver in meats and Medicines that cool the blood.

Topicks are to be uſed in all, firſt they muſt repel the blood flowing to the part, and abate heat and pain, and then diſſolve the matter; and if it tend to ſuppuration, they muſt Cure the Impoſtume and Ulcer. And they muſt be choſen according to the Inflammation, as it is great or little and according to the part.

We repel the humor flowing with aſtringents and coolers, chooſing the ſtrongeſt when the heat is great, eſpecially in Furunculus; And if the Flux be great and the Inflammation alſo, and in the Face, or Joynts and noble parts. In the other we uſe more gentle repellers. Eſpecially if the Inflammation be about the Jaws or Breaſt, leaſt it cauſe a Quinſie or pleuriſie. To theſe repellers, when the Defluxion abateth, we add gentle reſolvers and anodynes, if there be pain: Thus,

Actual coolers are vulgarly uſed, if we fear Inflammation, from a ſtroak, or bruiſe, to prevent ſwelling, as a cold Stone, Iron, Lead, or Ice: Or cold water. This

muſt

must not be done, but at the first, least the blood congeal and will not after be discussed.

Some commend the putting the Finger presently in cold water, in Paronychia or Fellon: or in hot Vinegar, but boyling water is best.

Make repellers of green Herbs, that are both potentially and actually cold, as of Plantane, Nightshade, Housleek, knot Grass. With Vinegar, Oyl of Roses, Myrtles, Quinces and Barley meal.

Apply Acrons bruised and Sloes.

Or Bran fryed in Vinegar, or Rice, and Water often.

Or red Rose Cakes, with red Wine and Vinegar, or Roses.

Or: Take *the Juyces of the Herbes mentioned six ounces, Rose vinegar and red Wine three ounces, Oyl of Roses, Myrtles, or Privet an ounce and an half, with ponder of Bistort roots and Pomegranate peels, each a dram; Mrytle or Barberry seeds, Bole three drams,* after you have stir'd them in a Leaden Morter, make an Oyntment, or with Vinegar and whites of Egs and Barley meal, a Pultis.

The usual defensative against Inflammations, is of Bole Vinegar and whites of Egs and Oyl of Roses. You may add Sanguis Draconis, Blood-stone, and rust of Iron and sealed Earth, Coral and Camphire.

When there is pain, repel thus, add the fourth part of red Wine Vinegar to Milk, Bole, and the white of an Eg.

Or wash with Vinegar and Water.

Three or four pound of Quick-silver allayeth heat and pain, being in a Bladder and applied.

So doth Juyce, Decoction and distilled water of Herbs, with pouders aforesaid.

Or foment with Oyl of Roses, or Violets, and rowl the part.

In Paronychia or Fellon, make a Bath for the Finger of five leaved Grass, Wormwood, Agrimony, Straw-berry leaves, Myrtle-berries with Wine.

A repelling Oyntment: Take *juyce of Plantane, Housleek two ounces, Vinegar an ounce, Oyl of Roses two ounces and an half, Vinegar an ounce, Bole half an ounce, with the white of an Egg, and a little Turpentine,* afterwards to digest, add *Cerusi, Cadmia and Litharge.*

Or: Take *juyce of sower Pomegranates two ounces, of Nightshade and Rose water, each an ounce and an half; Camphire a dram,* anoynt; add *Barley flower* to make it stick. This is approved in Inflammation of the Nose.

As in Erysipelas, so here you may use Oyntments of Roses, Poplar, and Cerus, and plates of Lead also.

In great Inflammations, and when they are parts exquisitely sensible, use chiefly things to assuage pain. As Anodynes that cherish with their temperate heat. Or Narcoticks that dull the sense. These are not to be used alone, when we fear suppuration, but in case of necessity, because they digest, but at the first, add repellers and in the progress resolvers. But when you desire to digest, you may use Narcoticks alone, safely.

The same Narcoticks and Anodynes may be used, as in Erysipelas and these following: As Snayles not beaten, with the shells, least they be too rough; but taken out may be applied

And leaves of Henbane and Mandrakes baked in the Embers with Hogs grease and a little Saffron.

Or use this Cataplasm: Take *white Bread or Flower a pound,* boyl it in *springe Water and Proper stilled Water and Milk with Mucilage of Fleabane two ounces, three Egs, Oyl of Rose three ounces, Hogs grease an ounce, Saffron a dram.*

This is proper against a Paronychia or Fellon: boyl crums of Bread in Milk with the white of an Egg and a little Turpentine, and to ease pain, add Mucilage of Fleabane seed, with Barley meal, Opium and Camphire, and after to heal, add Ponder of Galls

Or this Cataplasm against any Phlegmon: Take *the Emollient herbs two handfuls, Althæa two ounces, flowers of Chammomil, Melilote, Roses, Bran, each a pugil:* boyl and bruise them, add *Oyl, Butter, Grease and Saffron.*

Or bruise Fleabane, or its seed, with Oyl of Roses and a little Vinegar, and apply it, or boyl it with Milk and Althæa roots and add fats.

Or use the Mucilage of Fleabane with the white of an Egg, Juyces and fats.

The Plaster of Diachylon the less by *Mesue* made of Mucilages of Fleabane and Henbane easeth pain and digesteth.

Oyl of the Apples of Strychnodendron, and of the fruite of the Balsamine tree called *Momordica,* is an approved remedy, and so is Oyl of Henbane seed.

The Chirurgions ease pain with an Egg raw beaten with Oyl of Roses and Bole to repel.

And to digest also they use Oyl of Roses, yolks of Egs and Cerus.

There is an Oyntment called *Anodynum,* made of Oyl of Lillies, Dill, Chamomil, Ducks and Hens grease to take away pain.

Or this; Take *Juyce of Henbane, Tobacco, Hemlock, or Poppies, Mallows, or Marsh-mallows, each two ounces; Oyl of sweet Almonds, and Roses, each two ounces;* boyl them, add *Mucilage of Althæa,* or the like *two ounces, or of Mucilage of Henbane seed,* which is best, *Butter an ounce,* make an Oyntment.

The Water of Frog spawn is highly commended, and Juyce of Hemlock applied with a Clout, also raw Crayfish.

Also we must dissolve or discuss the Humor which is flown to the part, least by continuance it turn to Matter, and stink; which though Nature doth of her self, if it be thin, yet if she be slow in her work, she must be helped with dissolvers, which in the beginning of the increase of the disease mixed with Repellers, does it rather by dryness then heat; and after they must be used alone, and the rather if the Phlegmon be œdematous, especially towards the Declination, when the heat ceaseth, adding Emollients to gentle Healers, that may discuss the Reliques, and prevent a Scirrhus.

This is done by Herbs mentioned against Erysipelas, as Pellitory, Mallows, Marsh-mallows, Orage, Coleworts, Henbit, Coltsfoot, Vervain, Moulin, Scarlea, Bindweed, Elder, Dan-wort, Penny-royal, Feaverfew, Achillea, Wormwood, Sesamum, Nettles, Lilly roots, Orris, Briony, wild Cowcumber, Asphodel, Lyris, Docks, Rhapontick, wild Hemp, Chamomil, Melilot, Dill, Elder flowers, and Water-lillies, Fœnugreek, Lineseed, Barley, Wheat, Lupins, Orobus, and Flower of Millium Panicum.

You may apply one or more of them bruised or boyled, as Pellitory and Scabious; or lay the whole Leaves thereon, without the Stalks.

Or make an Anodyne Oyntment of Dwarf-elder to anoint the part inflamed. Thus, Take *Dwarfe-elder cut small, put it in a Glass phial, coule it in Dough and bake it, then take out the glass, and you shall find a thick rediish Oyl, anoint therewith.*

The Herb called *Paronychia* is good against a Felon from whence it had its Name, the Felon is an Inflammation at the Root of the Nails; as also five leaved Grass, or the skin of an Eg shell, or Dandelion, milkie Stalks, coule about the Finger.

Phlegmons may be wash'd with Juyces, Decoctions, or still'd Waters of Herbs; as that of Moulin which is best, with Rose-water.

Aqua vitæ doth so dissolve, that it takes away Tumor and Inflammation presently, allaies pain: when Labourers hurt themselves, they use it.

Dioscorides commends the Lyes of Wine in all Inflammations, it is good to dissolve and to assuage pain.

Also use Oyl of Chamomil, Lillies, Orris, sweet Almonds, or Roses, or Fats, as Oesipus of Wool or Propolis.

Or bruiſe or boyl the Plants mentioned, with Vinegar at firſt, then Wine, Honey, Oyl, Fats, Turpentine, and Brans, or Meales.

Or apply Raiſons as in Furunculus, with Salt, &c.

Or chew Wheat or its Flower, with Water and Honey, or with Leaven.

Or Roſe cakes boyled in Lye to diſſolve, adding Oyl of Chamomil, or Dill.

Or Smallage, and Henbit beaten with Tartar, and Oyl of Chamomil.

Or this Cataplaſm. Take *Roots of Althæa, Docks four ounces, Lillies two ounces, Pellitory, Vervain, Coltsfoot, each an handful; Feaverfew, Wormwood half an handful, Chamomil flowers and Roſes, each a pugil; Barley meal, and Fænugreek four ounces, Figgs five pair,* boyl them in *Water,* bruiſe and add *Oyl of Roſes, Chamomil, each two ounces; Hens greaſe an ounce and half.*

Or make it of *Bran* or *Wheat flower a pound, Peaſe, or Lupine flower two ounces,* boyl them in *Water and Honey,* add *powder of Orris, red Roſes, each two drams; Myrtle ſeeds a dram, Saffron half a dram, Oyl of Roſes and Chamomil, each an ounce and half.*

A Cataplaſm to digeſt more, and to be uſed in the Declination: Take *Lilly roots three ounces, Orris, and Briony roots two ounces, Mallows, Moulin, Bindweed, Dane-wort, each a handful; Chamomil, Melilot, Elder and Roſemary flowers, each half a handful; Meal of Lupins, or Orobus and Fænugreek, each two ounces; Dates ſix,* boyl them in *Honey, and Water,* add *Oyl of Lillies and Orris, each an ounce and an half; of Roſes an ounce, Hogs greaſe an ounce and half, Oeſypus an ounce, with Saffron half a dram,* make a Cataplaſm.

Or this of Juyces. Take *Juyce of Pellitory, Coltsfoot, Plantane, each two ounces; Mucilage of Mallows, Fænugreek, or of whites of Eggs three ounces, Honey an ounce, Oyl of Roſes two ounces,* anoint and add *Brans, Litharge, Ceruſs, Saffron,* or apply the *Aſhes of Box tree, with Honey.*

Or, Take *Cow dung half a pound, Juyce of Houſleek, or Nightſhade two ounces, Oyl of Chamomil and Roſes, each an ounce; Bole half an ounce,* anoint or apply it with *Meals or Bran.*

Or apply Olibanum, with Fœnugreek, Meal, Roſin, and Honey.

In Furunculus, eſpecially anoint with Scammony, Honey and Oyl, or with Juyce of Thapſia, or of Mulberry-roots.

Or with Sandarack, and Greaſe, or Earth Cimonia, and Vinegar, or make Plaiſters of the Stone *Aſius,* with Pitch and Roſin, according to *Dioſcorides.*

Who commends Earth Cimolia, Samia, Burning Stone, Oſtracites, Alabaſter, and get alſo the pouder of a Whetſtone, when it comes off by whetting Iron alone, or with Honey.

Dioſcorides commends pouder of Ivory for a Felon.

And *Hartman* commends Balſom of Sulphur, with a Clout to be uſed before and after Suppuration, and opening for the ſame.

You may alſo add Urin, Lye, and white of Eggs, to the Juyces mentioned.

Or uſe a Decoction of Litharge in Vinegar, with whites of Eggs added, and Ceruſs.

Or the Oyntments of Ceruſs and Litharge mentioned in Erysipelas.

Or Diachylon magnum, or Ireatum, or Diapalma, or Colcothar, or Plaiſter of Calcitis of *Avicen* to digeſt, or Triapharmacum, of Litharge by *Meſue.*

Dioſcorides ſaith that the Root of Lyons foot is a good Amulet againſt Furunculus.

The Cure of a Contuſion with Inflammation, or with Tumor not inflamed.

If there be a little Tumor from a Contuſion, without a manifeſt or great wound, (for of wounds with contuſion and inward Fractures we ſpake elſewhere) it goes of it ſelf away, or by diſcuſſers, and the blewneſs vaniſheth. If it be great, and an Inflammation feared, or come firſt, uſe Repellers, then Diſcuſſers, not as in Phlegmon, but with reſpect to the bruiſed Fleſh and congealed Blood. And if it will not be diſcuſſed but ſuppurate, then uſe Ripeners as in Impoſthumes, and after cure it as an Ulcer.

To hinder the Flux of Blood at the firſt after Blood-letting and other Revulſions mentioned in Phlegmon; If you will uſe Repellers (when the fleſh is bruiſed and hath much Blood, you muſt not cool as in a Phlegmon, and bind) but apply them to the circumference of the part conſumed, not upon itt leaſt the blood by them by congealed and ſtopped.

Therefore apply Repellers and Diſcuſſers alſo, ſuch as are preſcribed for an Inflamation in the progreſs; as Oyl of Roſes and Myrtles, with whites of Eggs, or Mucilage of Fleabane, with aſtringent Pouders of Myrtles, Roſes, Pomegranate flowers, Snakeweed roots, Tormentil, Dragons blood, Bole, Maſtick.

Or thus: Take *Lentils two ounces, Myrtle ſeeds, and Pomegranate flowers, each two drams; Roſes, Sumach and Tamarisk, each a dram; Acacia, Maſtick, each two drams; Frankinenſe, Aloes, Dragons blood, each a dram; with Oyl of Roſes, Turpentine, and Wax,* make a Plaiſter or Liniment.

If there be no fear of Inflammation, diſcuſs the congealed Blood, though no Tumor appears but pain only, for then to be ſure the matter lyeth deep. And give internal Potions if you fear any part to be broken, or blood to flow into the Cavities or part conſumed, and there to congeal. Theſe internal Potions do cure alone very often in that caſe, when there is pain, and little or no tumor. Theſe ſhall be ſpoken of with vulnerary Potions, but theſe following are the external Remedies.

Cataplaſms and Emplaſters of Wormwood, Chamomil, Melilot flowers, or Roſes boyled in Oyl and Wine, adding Bean flower, or Mummy, Sanguis Draconis, each a dram to a pound.

If the Head be bruiſed, add Bettony, and Head herbs, but not too hot, if you fear Inflammations from the pain.

Or uſe pouder of Wormwood, with the white of an Eg.

Or Bran boyled with pouder of wormwood, and Vinegar, adding Oyl of Roſes or Chamomil.

Or Lilly, Dragon roots, with Honey, and Goats dung.

Or Bean flower, with Oxymel and Tar, if the Nerves be bruiſed, or Orobus meal.

Or Snails bruiſed, with Fœnugreek or Bean flower.

Or Cow dung, and Oyl of Roſes.

An excellent Cataplaſm to take away blewneſs in contuſions. Take *pouder of Comfrey roots,* boyl them in *water and Honey to a pound,* add *Juyce of Rue and Wormwood, each an ounce and an half; Cummin ſeed two drams.*

Or, Take *Comfrey roots in pouder a pound, Pouder of Chamomil, Melilot flowers and Wormwood, each an ounce; Bean and Fænugreek meal, each three ounces; Butter and the Oyls mentioned two ounces, Saffron half a dram,* make a Cataplaſm, add *Juyces and Cummin ſeeds.* This diſſolves the contuſed mortified Fleſh.

Anoint with hot Oyls, as of Chamomil, Dill, Lillies, Elder, Dane-wort; or add Repellers, as Oyl of Myrtles.

Or, Take *Capons greaſe and Turpentine diſſolved in Honey and Aqua vitæ.*

Or uſe the Oyntment made of a Gooſe in Podagra mentioned, with a little Cummin and Wormwood in pouder.

Or uſe Dialthæa, with Oyl of Violets, Earth-worms, Rue, Chamomil, Gooſe greaſe, Butter and Mummy; and it is beſt when after anointing, you ſprinkle upon the part pouder of Cummin ſeed.

Or Oyntment of Alabaſter, Agrippa, Ceruſs, or Oxycroceum.

Or a Lixivium of Vine aſhes, with Vinegar, Salt and Honey.

Or the Aſhes of Vines applied with Vinegar.

Or waſh with Urin or Aqua vitæ, applied with a clout hot,

hot, and quickly after will hinder the swelling, and discuss the blood.

At the conclusion to dissolve the matter, foment with the Decoction of Dwarf-elder roots, Osmond, Sanamunda, wormwood, Penny-royal, Mousewort, Chamomil, Melilot, Elder flowers, and Roses.

Or wrap the part in a hot Sheeps skin new flead off, or in an Ox skin, or put the part into a hot Dunghil.

In the conclusion of the Ears, *Dioscorides* anoints with Sulphur, Honey, and wine, and applies Onions and Bran.

If the Glanduls swell or be inflamed, or the Stones, you are instructed what to do in the Tumors of the Glanduls.

The Cure of Bubo and Parotis, with Inflammation which is called Panus & Phyma.

The Swelling of the Glanduls with pain, chiefly in the Groyns and Armpits, or behind the Ears called *Parotis*. If it be without Inflamation with pain, as in young people that are growing, or when they swell from scabs and pains in the part adjacent, they are not much to be regarded. But we must prevent the Flux, and keep them from being handled, as Children do, and use revellers and derivers, if need be.

If the Tumor and pain be great or the Inflammation is begun or in being. And comes from pure blood, it is called *Phygethlon* or *Panus* when great, if it be less and from impure blood it is called *Phyma*, *Bubo* or *Parotis*. And these either come alone, or with long acute and malignant Diseases, or in the French Pox or Plague, with, or without, Inflammation. And then first of all we evacuate, revel and derive by Blood-letting and purging, in respect of the Disease accompanying the Tumor, by which means alone, the body being handsomly purged, Veneral Buboes are cured somtimes.

As for Topicks at first, if there be great Inflammation by reason of the pain, you must use Narcoticks and Anodynes. But you must not use repellers, as in other Inflammations, except there be an Inflammation in the Adenes, from an external cause, because the venemous humor, which causeth the Diseases, is commonly purged forth by these Emunctuaries. Therefore this motion of nature is rather to be helped and the tumors to be drawn forth with loosners to make it flow, and gentle heaters that abate pain. And you must use stronge and very hot drawers, when the Bubo, or Parotis are Pestilential; these things being applied at the first, you must then mix things to resolve the Humor gathered, or to ripen it, mixing in Pestilential causes things that attract poyson and abate its force and work by a certain propriety. Also in the pestilence to draw poyson out of the Body, we use Scarifications and burning. And when there is an impostum, you must cure it, being broken, as an Ulcer.

As for the remedies, if the pain be first to be cured, use the Anodynes mentioned in phlegmon and the Narcoticks which also dissolve, as I shewed, as Herbs Narcotick, Aqua vitæ and Lees of Wine.

As for other remedies to Relax. Attract, Dissolve, Ripen, Open, and Correct, and Resist malignity by potential or actual propriety: They are as followeth.

The greasie wooll of Sheep, that hath *Oesypus*, may be applied to the *Bubo*, *Parotis*, behind the Ears, which repels by its filth, and so not only abateth pain in Inflammations, but repels and relaxeth, especially if it be first dipt in relaxing Oyls.

A common relaxing Oyl to ease pain: Take *common Oyl, or Oyl of sweet Almonds and fresh Butter two ounces, Hens or Hogs grease an ounce, mucilage of Fleabane, Lineseed or Althæa half an ounce, with the yolk of an Egg.*

Another to digest, also is made of Oyl of Chamomil, Melilot, Dill, Elder, Wall-flowers, Lillies, Orris, Jesamin, bitter Almonds, with Hens, Duck or Goose grease, with Mucilage of Fenugrek and Saffron.

Or make a Relaxing, Attracting, Digesting, Fomentation of the Decoction of Mallows, Lillies, Camomil flowers, and Melilot, as the Inflammation of the Papps and Stones. Also you may apply often a hot Spunge boyled in Wine and Water.

Or Althæa, Mallows, Pellitory, Lillies, Chamomil, Melilot, to relax and dissolve the Bubo and Parotis; or the Roots of Daffodil, Swordgrass, Rue, Bulbus, and Personata, or Aster Atticus, which is called *Bubonium*, or Inguinalis, because it is proper for Buboes. Or Scabious, which is singular in the pestilential Bubo. Or Moulin roots and and all Maidenhair, Plantane, Arage, Brooklime, Elder, Yarrow, Haresfoot, Sclarea, Southernwood, Galiopsis, Acinos, Isatis or Wood, Coriander, Onobrychis, Conyza, Pycnocomum leaves, of wild Olive, or the Flowers of Panax asclepias. And when you will dissolve and attract more, Rocket and yellow Crowfoot, and Leaves of Consiligo, Nut-tree bark, and black Briony, bruised and boyled in Water or Wine, or Oyl and Water, with Vinegar, Honey, or Oyl of Roses, Chamomil or Fats. *Dioscorides* applies it beaten with Salt; or with Treacle or Mithridate, when the Bubo is pestilential.

Or with Meal of Barley, Pease, Lineseed, Fœnugreek, Lupins, Darnel made to a Cataplasm.

Or the Brans alone, with the Liquors mentioned, with Oyls and Honey often applied warm.

Or make Cataplasms of Onions, Lillies, Althæa, and Briony roots, and Orris, with Butter, Grease, or Oyl, and with Figgs, Fœnugreek and Lineseed.

Or in the Plague with Treacle, Mithridate, and other Antidotes; or cut the top off from an Onion, and fill it therewith, then cover it, and roaste it, and bruise it, and lay it on, with Vinegar, Juyce of Citrons, or Pomegranates, Oyl of Scorpions, St. Johns-wort and Saffron.

Raddish is good in the plague, if it be sliced and laid on after, with a hole in the middle, to let out the Venom.

Or apply green Crab-apples in the plague.

Or a Pomegranate sliced and boyled in Vinegar, adding Juyce of Scabious, or Sorrel, or the distilled Waters thereof.

The Yolk of an Eg and Salt, draws and dissolves the Juyce of Scabious. And if the Bubo be pestilent, with Antidotes, or salt Bacon.

Or black Soap, with Lye and Ammoniack, dissolved in Vinegar, to discuss a Phyma.

In the venereal Bubo drink and wash with Water of Celandine.

A Cataplasm to attract, dissolve, and ripen. Take *Lillies, Onions, Althæa roots, Raddish, all peeled and cleansed four ounces, Mallows and Scabious, each a handful and an half; Chamomil and Melilot flowers, each a pugil; Figgs five pair*, boyl and stamp them, add *Fænugreek meal two ounces, Gum Ammoniack and Galbanum, each six drams*; dissolve them in *Wine, and with Oyl of Lillies and Grease* make a Cataplasm.

It will be stronger, if you add Mustard seed, pigeons dung.

This is an admirable Cataplasm in the plague. Take *a great Onion, and make it hollow, and fill it with Treacle, roast it in the Embers, take off the outward Skins, and bruise it with Meal of Secalis, Honey, Yolk of an Eg, Goose dung, and a little Turpentine*, apply it hot.

Emplasters to attract, and then dissolve, that must be cut in the middle to let out the Vapors, are Diachylon magnum, and Ireatum, or Melilot, or Althæa, with Rosin, Galbanum and Ammoniack.

Or apply Galbanum alone to the Groyns, when the pockey Bubo appears, and then vanisheth, to draw the Venom to the part.

Or, Take *Galbanum, Ammoniacum, Bdellium, Opopanax dissolved in Vinegar of Squills, or Aqua vitæ, and with Oyl of Lillies, and half an ounce of ponder of Orris to four ounces thereof, and two drams of Scabious, or a dram of Euphorbium or Cantharides*, if you will have it stronger.

Or Treacle, with spirit of Sulphur, and Oyl of Juniper is good to draw out Venom.

Ano-

Another proper for a *Phyma*: Take *Labdanum*, *Bdellium*, *Ammoniacum*, dissolved in *old Oyl with an ounce of Proplis*, or other dissolver, *Turpentine half an ounce*, *Honey and Hogs grease*, *of each an ounce*; *with Pitch and wax*, make a Plaster.

At the first in the Plague, especially use these to draw out venom.

A Cock, Hen, or Cicken, or a Puppy, or a Frog, or Toad, which is best divided, or Sheeps lungs hot and bloody, often applied.

The Chymists in the plague, take Toads and make a hole in their Heads and hang them in the Air to dry, and keep the dry being beaten flat. These they lay upon the Bubo to suck out the venom, for they will swel, being laid on, as if they would break. See *Paracelsus* in his Book of the plague.

Or take a Cock, Hen, or Pidgeon, make the rump bare and cast Salt thereon, and hold the bill fast, that as the vulgar suppose they may suck the poyson in backwards.

A Cupping-glass with great flame, is good also to attract poyson, applied upon the part, or about it.

Or Housleeks to suck out venemous blood.

Somtimes we scarifie or cut a pestilent Bubo, to make way for the poyson, or use an actual or potential Cautery.

Some cut it clean off. These are dangerous remedies to be used with deliberation, for they draw not much out of the body, and endanger the patient, especially if there be Inflammation.

The Cure of Inflammation of the Paps and Stones.

If Tumors be in the Breasts and Stones without a true inflammation, from abundance of Milk, there is rather a distention with pain in the Breasts, this is to be refer'd to magnitude increased, or when the Stones swel without Inflammation, as in the Colick, it ceaseth with the Colick.

But if there be a Tumor in them from other Causes and Inflammation be feared or begun. Which causeth perverse Ulcers, often in the Breasts, and hardness orScirrhus in the Stones. The Cure of them shall be shewed, as in the Inflammation of them.

If blood flow much to them, presently open a Vein, if the paps be inflamed in the Arm, and then in the Foot, especially if Terms be stopt. If the Stones be inflamed, first open a Vein in the foot, then in the Arm to revel and derive, and apply Cupping-glasses to the Arms and Hips with Scarification and Repellers to the part, and Anodynes. Then dissolve that which is flowed to the part, least it turn to matter and cause an Ulcer, which in those parts is not easily cured.

Use the repellers mentioned in *Phlegmon* and the digesters also, such as have meals in them.

Or thus: Take *Plantane*, *Groundsyl*, *mallows*, *each a handful*; boyl them, and add at the end *water of Nightshade and Roses*, stamp, and add *Barley*, *Rise*, *Bean and Pease meal*, *each three ounces*; *Oyl of Roses two ounces*, *Oyl of Chamomil an ounce*, make a Cataplasm *with Bdellium*, dissolved in *Vinegar half an ounce*.

Also take remedies prescribed in Phlegmon against pain such as are Narcotick and digest rather then Anodynes, which will cause Suppuration, which must here be prevented.

And use dissolvers as in Phlegmon adding the roots of Coriander and Dasies.

Or apply Coriander, Raysons and Honey beaten.

Meal of pease and Beans is best here, if boyled in Wine or dissolving Oyls mentioned in Phlegmon with Honey, Vinegar and Cummin seed.

Or mix Mucilage of Althæa, Fœnugreek, Linseed with Farines or Meals and Oyl.

Dioscorides commends Wallnuts, with Rue and Honey.

And you may use Raysons stoned, or Figs and Dates, boyled in Wine, or the pulp thereof a pound with pease and Bean. Meal, each two ounces; Fœnugreek half an ounce, with digesting Oyls, Orris pouder half an ounce, and seeds of Irion a dram, Honey two ounces, to discuss Better.

Dioscorides applies Vine leaves and Salt.

And Leaven with Organ and Salt.

Also dryed Cow dung, boyled with Honey and Wine, is good.

Or Treacle with Saffron, Honey and Oyl.

Or Foment, as in Flegmon, with Althæa, Mallows, Wormwood, Orris roots, wild Cowcumbers, Melilote, Chamomil, Rosemary, Elder, Stœchas flower, Roses, Fœnugreek, Linseed, common Figs boyled in Wine, adding Honey and Vinegar.

Or dip Wooll in digesting Oyls, and apply it.

Or this Oyntment: Take *Oyl of Chammil and Lillies*, *each an ounce and an half*; *Galbanum and Labdanum*, dissolved in *Vinegar*, *each half an ounce*; *Cummin seed a dram*, *dryed Cow dung two drams*, *Saffron half a scruple*, *with Wax*.

Live Crabs, or unboyled Cray-fish, bruised and applied are highly commended.

If the Inflammation of the Paps, or Stones tend to Suppuration, Cure it as impostums.

The Cure of Impostums.

Impostums coming after Inflammations, are a like Cured in all parts. By ripning, and opening, and curing the Ulcer.

An Impostume must be ripned as soon as it comes, as when the matter flowed in the Phlegmon, cannot be dissolved, that so it may be turned to *Pus* or *Quitter* and voided by an Ulcer. Such an Ulcer is not very difficult, if well looked to, but when we know and perceive that an Inflammtion tends to an Impostume, we must help nature, and the more, when it is apt to suppurate presently, as most little Pustles do. And we must be more diligent, if the suppuration be difficult and long, as in Furunculus, in which instead of matter there is a lump of flesh that is long fixed, and especially in parts of most concernment, or noble, where the matter may prejudice by being long kept in, as about the joynts and in *Paronychia* or Fellons except the matter be presently concocted, and get forth the bones in that place, and the Nerves grow foul. This Maturation or Suppuration, is commonly done by the benefit of Nature only, which concocts the Humor, and therewith some part of the part afflicted, in which the blood is without any putrifaction, only it turnes to a white matter. Which stinks not, for putrefaction differs much from Suppuration, and follows it when nature ceaseth to Maturate or ripen, or doth it slowly or imperfectly, as in Furunculus, therefore to help her, the Physitian applyeth Suppuratives or ripeners, which are temperate or gently hot, and Emplastick, which by nourishing the natural heat, makes Maturation. This is done by Anodynes, which after the same manner, as I shewed, cause Maturation. And many Suppurative Medicines, would be Anodyne, if the breeding of matter did not cause new pains.

Also many dissolving Medicines, being not too hot or dry, but gently hot, when they cannot dissolve matter, by reason of its incapacity and unfitness, help Suppuration, when nature tends that way, or at least hinder, if not. All these maturating or ripning remedies, being actually warm and gently hot, doth thereby hasten Suppuration.

Also concocting remedies ripening or Suppurating are applied, that they may better operate in forms of Cataplasms or plaisters, as *Triapharmacum Galeni*, made of Wheat floure, Oyl and Water boyled to a pultis, and colored with Saffron to make it concoct the better.

Or instead thereof, use this: Take *wheat flour*, *or of Zea*, *or Maizi*; (which are outlandish grain privatly commended) *or crums of Bread*; boyl them in *water*, *or fat broath* not

not ſalted, *or milk* if there be pain, *and to a pound*, add *Oyl or Butter, or Hogs greaſe, of each an ounce and an half; two yolks of Eggs and mucilages*, if you pleaſe.

Or make it of crums of bread or flower, with Lillie roots, Onyons and Milk, adding Butter, Oyl or Greaſe. You may boyl alſo Mallows, Althæa roots, Ground-ſill Figs.

Or: Take *Marſhmallow roots and Lilly roots, each two ounces; Bryony roots an ounce, Emollient herbs, Groundſeyl, Colewortes, Eryngus three handfuls Violets a pugil, Figs ſix pair Rayſons ſtoned ten pair, wheat flower or Bread three ounces, powder of Fænugreek or Linſeed two ounces*, boyl and bruiſe them, add of the fat mentioned *two ounces, Oyl of Lillies, Violets ſweet Almonds an ounce and an half, Saffron half a dram*, make a Cataplaſm.

Or: Take *a white Onyon* (which becauſe it is not ſo ſharp as the other ſort, doth more maturate or ripen and digeſt) *and Figs ſliced*, boyl them, mix them with *Butter or Oyl and flower, yolks of Eggs and Turpentine.*

Or: Take *Figs two ounces, Labdanum, Frankincenſe, each a dram, Storax Liquid and Turpentine, each half a dram, with Flower, Oyl and Hogs greaſe*, make a pultis.

Or roaſt Henbane leaves in the Embers, and apply it with fats and digeſters, for the fats being temperate, will moderate their Heat.

The roots of Dogs Tongue bruiſed, is good againſt the Plague, and ſuppurates well.

Some apply Bird-lime, others liquid Verniſh.

Dioſcorides applies Birdlime, Wax and Roſin, equal parts.

Or Bird-lime with Mallows, Wormwood, Linſeed, Honey and Oyl boyled.

Or ſweet Butter and Wax.

Or Pitch, or Wax, or both with Oyl, Turpentine and Frankincenſe.

Others apply yolks of Eggs or with the whites, with Oyl or Butter, or Suet, or Marrow and Turpentine, with Frankincenſe and Saffron.

Or Mucilage of Althæa roots, Fænugreek and Linſeed with Oyl of Butter or Greaſe, and yolks of Eggs.

The uſual Maturating plaſters, are *Terapharmacum Galeni* made of Pitch, Roſin, Wax and Cows greaſe, or Oyl, if there be pain, and then it is called the little Baſilicon of *Meſue*. Alſo common Diachylon: or the little Diachylon in pain. Or the great, which digeſteth moſt, and if it will not be digeſted, it will help maturation, if there be much Oyl, and you uſe other mollifiers, as Oyntments of Althæa reſumptive and Aureum. *Aetius* uſeth Unguentum Macedonicum, to ripen the Furunculus.

Or foment with Water and Oyl, or Oyl alone, or apply it with wooll, before you uſe other application.

The juyce of Colewort, or the mucilage of its ſeeds, is good.

Or Fleſh, or Fiſhes, or Crayfiſh, cauſe Suppuration, or a warm hand often applied. Therefore we prohibit handling of any Tumors, when we will not have them Supperate.

When the Impoſtume is ripe, it muſt be opened, that is when there is matter, which you may know by its ſoftneſs and point, as we ſhewed.

Somtimes it muſt be opened, before perfect maturation when it is about the joynts, or noble parts, leaſt the matter retained ſhould hurt them. And when the Bubo is from a peſtilent or malignant humor.

Nature or things that ripen do open, when the Skin, Fleſh and Blood are concocted, and made more tender and ſoft by boyling as it were.

Or we open by violence and cutting or breaking the skin, with potential or actual openers.

They which potentially open, are ſome milder, which ripen and open, alſo theſe we uſe when we deſire to open by degrees, others are ſtronger and ſuddenly corrode, burn or pierce the Skin.

Leaven added to the above mentioned maturatives, or ripners, or yolks of hard Egs and meal, or Greaſe and Onions, will mature and help to open.

Scabious, Coleworts, Daffodil roots, Bugloſs, onyon do the ſame.

Alſo rotten Nuts, and Watercreſſes, and Smallage, which are ſharp, bruiſed and applied with Figs, Meal and oyl.

Or Danewort bruiſed with Hogs greaſe, is good, if often applied in the Impoſtums of the breaſt.

Or rotten Apples, ripe Bramble berries, or ripe berries of Herb true-love open impoſtums, or an Onyon, or Garlick.

Or aſhes of Colewort roots, Figtree with Vinegar open ſtrongly, but gently with greaſe.

All dungs are approved to ripen and open impoſtums, as Ox dung, eſpecially fodder. or Goats dung for the parotis, Gooſe dung is highly eſteemed in the Fellon, or Paronychia, being new and hot, for it preſently breaks it. In other Impoſtumes, uſe Cow dung, Hogs Goats and Dogs dung. And when you will open quickly and forceably apply Pidgeons and Hens dung. All theſe may be applied alone, or boyled in Wine, adding Vinegar or diſſolved in Oyl and mixed with meal.

The Cataplaſms made of the things mentioned, will be ſtronger. If you add to the Plants bruiſed or boyled, as much Leaven and the part of Doves dung with ſtrong Vinegar, which will boyl the skin, and make it open. And they will be ſtronger yet, if you add *Muſtard half an ounce, or Niter and Sulpher vive, each two drams.*

A Plaſter that preſently breaks all Impoſtums though venemous and peſtilential: Take *Load-ſtone half an ounce, Turpentine and Oyl of Scorpions, of each an ounce; Maſtick, Amber, Myrrh, Sarcocol, Ammoniacum, Cantharides prepared, each two drams; Roſin four ounces, wax half a pound*: make a Plaſter, ſpread it upon Leather, or new cloth, and apply it hot.

Or mix Honey Anacardine, with Pitch and apply it.

Or Euphorbium boyled a little in oyl, becauſe it burns, add dungs and a little Ammoniacum.

Or uſe Sal Armoniack with Leaven and yolk of an Eg, Saffron and a little opium.

Or quick Lime with Soap, Honey or faſting ſpittle.

Potential cauteries open the skin ſooner by burning, with pain, but without when they mortifie and black the skin. And though the eſcar ſtaies long, yet round about where it ſeperates preſently from the ſame skins there is paſſage for the humor, till it fall off. Theſe are applied in that part of the Impoſtum, where it is ſofteſt, or pointed in a plaſter having a hole in the middle, where they are placed, leaſt they ſhould ſpread and inflame, and if there be pain it muſt be after aſſwaged, and the part muſt be defended round about with the defenſive oyntment mentioned in phlegmon.

Galen preſcribes many as Cauſtick balls of *Polydus, Andro, Muſa, Dyonus*, made of Calcanthum and Allum and the like. Alſo the two cauſtick oyntments of Andromachus.

The Arabians have many. *Falopius* and *Paræus* mention the chief, which work quickly without pain and without Opium, which is uſed but to little purpoſe, as I obſerve.

Among which that is wholly without pain, which is made of Capital Lye boyled by degrees to a ſtone. This Lye is made of three parts of unſleaked Lime, and two parts of Wine Lees burnt, with water poured on, and often ſtrained or boyled, and it is ſtronger, if inſtead of water, you uſe a Lye of Bean ſtalks or Oak.

And it will burn the skin ſooner, if you add the fourth part of *ſal Armoniack*, or Allum, or Calcanthum to the Lime and Lees of Wine, but then it is more painful and therefore they add *Opium*.

You may boyl up a Cauſtick ſtone alſo of Soap, Lye with Chalcanthum, ſal Armoniack or Allum.

Sublimate made into a paſt with Populeon to abate pain, and Blood-ſtone to allay Inflammation, doth the ſame.

Or Cantharides, with Leaven and Vinegar, and Verdigreese, or Chalcanthum, or a little Orpiment; which wil work sooner, and the pain will be less.

Some wet the part with Aqua fortis, and six parts Water.

A caustick Water: Take *Vitriol and Arsnick, each two ounces; Sublimate half an ounce, Juyce of Briony six ounces, pouder of Cantharides two drams*, distil them, and apply one drop to the place to be opened.

Or a drop or two of Oyl of Vitriol: This is the way of *Nicolas Massa*.

Actual opening is quickest, with a Knife or Lancet in the place that is soft and pointed, where we feel the matter thrusting it in til they come forth, and let the Orifice be large enough. If it be about the bendings, observe the wrinkles, that you may cut according to the lines of them.

When the Impostthume is deep, especially about the Joynts or other parts, where the matter remaining may do hurt, you must open it presently before the parts be corrupted, before the matter is concocted, or the Impostthume appear manifestly. Therefore in Paronychia or Felon if there be great pain, though Suppuration appear not, yet cut it open from the fingers end on the side of the Nail, to the Bone, down to the Joynt, for so shall it prevent the corruption of the bone from the matter.

A ripe Impostthume is somtimes opened with a hot Iron either burning through the skin, or making only an Eschar as a potential Caustick doth, but sooner. Also in a Felon we burn the corrupt bone, as shall be shewed in Ulcers.

The Cure of a Cancer.

A Cancer being a Tumor differing from a Phlegmon, growing by degrees without Inflanumation, and of a fleshy substance deeply fixed; and when it is ulcerated differing from other Ulcers by its fixed lump of Flesh, and the claws and turning in of the Lips, hurting by its venemous quality rather then by pain and heat, hath a different Cure from other Tumors and Ulcers.

First you must prognosticate, for if it be newly begun and be little, it is not to be known but by skilful Physitians, and it is usually neglected: And therefore you must declare that the growth thereof is hard to be hindered. And if it be grown, it is worse, and if it be at the height, it can never be cured; and if it be ulcerated, it is deadly, except it can be taken out by the Roots.

Therefore at the first beginning there is hope, when it is confirmed, there is less or none, especially if it be ulcerated; therefore palliate it thus.

And in regard we have no certain known Antidote against the malignant quality and matter that produceth and nourisheth a Cancer, we cannot resist it: For if that were known, we could cure it as other tumors, but it will not be discussed. And if we should go about to soften and suppurate it, as unlearned Chirurgions do, we should make it worse, and sooner ulcerate. Therefore let us endeavor by al means to hinder its growth, while it is growing, and after to keep it from an Ulcer, and if it be ulcerated, to keep it from corruption while it may be, or let us at first while there is strength, utterly root it out, or after when it is desperate. In the mean space all the time, let us keep the Body clean, and preserve the strength, and oppose Symptoms.

To hinder its growth while there is strength in the beginning, and when the Body is plethorick, let blood scarifie, and cup in the parts distant, or near to revel and derive. Against this also the Flux of Hæmorrhoids and Terms, is a good help.

We purge also from the beginning, to take away the plenty of Humors, and hinder the growth of the Cancer, than to abate Melancholy, which is thought to be the cause of the Cancer; for purging cannot take away the venemous quality thereof, as of others, as in the French Pox, wherein we purge strongly to cure it, therefore in a Cancer the Body being weak, it is not safe, nor profitable. Forms for Purges are described in other Diseases, therefore we shall not here repeat them.

The Patient must be refreshed with very good Diet as in Hectick Feavers, chiefly with Meats made of Cray-fish or Broath thereof, which hath a propriety as they suppose, from the Name rather then thing, for it is nothing like a Cray-fish in the shape. They must forbear salt and sharp meats, that it may not ulcerate: wine is good for them. And they must have Cordials inwardly given and outwardly applied, as in Hecticks. Especially such as resist Venom mentioned in pestilent Feavers, and such as shall be mentioned in venemous Ulcers, they are better then vulnerary Potions, which are ordinarily given in this case of a Cancer ulcerated. And they highly commend that of Pyrola and ground Ivy, boyled in Wine against Cancers in Womens Breasts,

As for Topicks while the Cancer is whole, we labour to hinder the growth and ulceration thereby, by Dryers and Astringents, which have a propriety to fix and harden it.

This is done by many Repercussives mentioned in Erysipelas and Phlegmon, made of Plants and their Juyces, besides the Anodynes and unctious Medicines.

Polytrichum is the best Herb in this case, and Herb Robert which is called divine, and Cancer-healers. Also Ceterach, Coriander, Agrimony, Polygonum. And Moulin, Plantane, Endive, Nightshade, Shepheards purse, Comfrey, Sanguisorba, Dock, Galiopsis, Housleek, Moonwort.

These are to be bruised and applied, with Vinegar, or Juyce of green Grapes.

Or thus: Take *Roots of Moulin and Docks, each two ounces; Polytrichum two handfuls*, stamp them with *Vinegar*, add *pouder of burnt Cray-fish half an ounce*, make a Catapiasm.

Another: Take *Meal of Lentils, or Pease a pugil, Kernels of rotten Nuts, or parched, bruised six*, boyl them in *Vinegar*.

The Flesh of Sea-crabs which are more like a Cancer, or Cray-fish, or Snails, or Froggs, is good boyled and applied.

You may apply the Juyces of the Herbs mentioned, with Vinegar.

Or thus: Take *Juyce of Plantane, Nightshade, Endive, Housleek, and of the rest two ounces, Rose-vinegar an ounce, Oyl of Roses, or Myrtles two ounces, Turpentine half an ounce*, stir them in a leaden Mortar, add *Pomegranate and Citron peels, each a dram; Bole two drams, burnt and washt Lead a dram, Camphire half a dram*, anoint often therewith.

A Plate of Lead is good to keep down a Cancer.

The Cure of a Cancer ulcerated.

In an ulcerated Cancer we dry and astringe more, to abate the stink and putrefaction, and constant gleeting of blood which bring death. And if any part be corrupt, we must endeavor to take it off with Medicines, and to root out the Cancer by manual Operation.

The Plants mentioned are good to dry, and now in an Ulcer, add Nettles, Rue, St. Johns-wort, Danewort, Scabious, Knotgrass bruised.

Or use the Juyces or Pouders, with Oyl of Roses.

Pouders also, or Ashes of Cray-fish, or Crabs, Snails, Froggs, Weezles brains, Mans dung dryed in an Oven, and other Dryers, as Stones of Myrobalans, or Olives, or Shoo-soles; or of the Herbs mentioned, or of old Willow Pithia, Pomegranate flowers, Seeds of Iron, Galiopsis, pouder of Harts horn; also of Lead burnt and washt, of Ceruss, crude Antimony, Tutty, Pompholix, Litharge: Also of Bole, Milstone, Gypsum burnt, and the rubbing of Whetstones. These may be mixed with Juyces, or stampt Herbs, and applied.

Or apply stampt Raisons, and Rue, and Coleworts boyled in Milk, with Sugar to drive away the stink, or lay on Bay leaves.

A good

A good Oyntment. Take *Juyce of Mouslin, Herb Robert, or Polytrichum an ounce, Honey three ounces, pouder of burnt Stones of Myrobalans two drams, Ashes of burnt Crabs a dram,* make an Oyntment.

This is better: Take *Juyce of Plantane, Shepherds purse, Agrimony, and Vinegar five ounces, Oyl of Roses, or Myrtles four ounces, Turpentine an ounce,* stir them in a leaden Mortar, add *Litharge half an ounce, Lead burnt and washt, Bloodstone, each two drams; crude Antimony a dram, Coral burnt and washt two scruples, Pearl a scruple, Camphire a scruple, Ashes of Crabs a dram,* make an Oyntment, to which you may add the pouders above mentioned, especially that of Mans dung.

Also use Oyl of Eggs stirred in a leaden Mortar.

Or Diapompholygos or plaisters of Lead, to dry a cancer ulcerated.

Keep it clean washt with Vinegar and Juyces of Herbs, or with stronge Lye of Fig-tree ashes, or Willow, or Juniper, or with Urin: They will be stronger if you add Vitriol.

The distilled Water of Mans dung and Coriander, is highly commended.

This following pouder preserved an old Man many years in a Cancer, from putrefaction, stink and bleeding, it was all over his Cheek and Neck. Take *Galls and Pomegranate peels, each an ounce; Gypsum burnt two ounces; Bole an ounce, Litharge and Cadmia, each half an ounce; round Birthwort three drams, burnt Lead two drams, pouder of Crab shells a dram,* make a fine pouder, or a plaister of them, with *Honey* and *Turpentine.*

We use Sal Gem or Allum, to take away corrupt Flesh, with an equal part of pouder of Earth worms.

Or mix therewith Juyce of Briony, or Dragons.

Or Ægyptiacum to resist putrefaction.

These are stronger, Orpiment and Tartar, equal parts, steep them in Vinegar, and make a pouder.

Or, Take *Crystal, Arsnick two drams, Cookowpint roots, an ounce,* make a pouder.

Or, Take *Orpiment a dram, Verdigreese two drams, white Wine a pint,* infuse them, pour of the clear, and boyl it till the third part remain, use it with a little Rose-water.

Or, Take *Sublimate a dram, Rose, Plantane, and Nightshade water four ounces,* boyl it a little.

The last Remedy is cutting it forth by the roots, if strength will permit. It is in vain to try when it is deep, and grows to the Flesh, Membranes, and Veins; for if a portion remain, it will grow again. And if it be great, and near great Veins, there is danger of great bleeding, which is dangerous, if it be not presently stopt. But sometimes it may be wholly cut out, with a part of the sound flesh: As when it is in the Thigh or Arm. And if you cut a great space above the Cancer, and take it away, it will grow again; as I observed in a Maid who had a cancer cut from her Knee. The Cancer in the Breast is taken away with cutting the breast clean off: But if any Root remain in the Ribs, it will return.

Give me leave to relate the Cure of a Cancer, which was told me by a Friend. Take *white Arsnick finely pouldered one part, Roots of Cookowpints pouldered four parts, Chimney soot* as much as will make it grey or ash coloured, keep this pouder for your use, the older the better, it will last five years. Sprinkle this pouder as thick as the back of a knife upon an ulcerated Cancer, taking heed that it touch not the sound flesh, lay it thickest in the middle, because the middle Root of the Cancer is commonly biggest, then lay thereon a pledget wet with spittle, that it may stick with the pouder, otherwise it will not work. The Patient must be dressed thus after meat, and touch not the the cancer, but with wooden Instruments. There are some cautions to be used in the application of this pouder, by reason of its divers operations; for in some it causeth pain, in other; not it pierceth to the Veins or Roots of the cancer, and there it sticks fast, so that it cannot be taken away without breaking of them. It must therefore be used but once, because its force remains till it takes all away with it. And no other medicines must be applied but round about in the circumferance as broad as two fingers, you must lay Defensives or Repellers to hinder Inflammation. As, take *Bole, Arsnick, Oyl of Roses, and Vinegar.* Also there is a great flux of blood sometimes from the piercing force of the medicine which breaks the Veins, with yellow and sharp matter, apply then nothing but dry double clouts, as often as they are wet, for it will be but a day or two, and will take away all pain. This done, expect the Cancer to fall from the sound flesh of its own accord, within eighteen or twenty dayes; for if the least Root be broken by force, before that time the cure is dangerous to be begun again. The separation being made of the cancer from sound flesh, use this pouder to the Ulcer. Take *fine Olibanum, Mummy, Mastick, Myrrh, Aloes, Sarcocol, each a dram; Opopanax half a dram, wash them in Plantane, and Rose-water,* and make *a fine pouder,* you may increase the quantity *of Mastick, Olibanum, Myrrh, and Sarcocol* to make it sharper. After you have laid this pouder thick upon the Ulcer, use this Oyntment upon a pledget. Take *Litharge of Gold two ounces, Mummy an ounce, Oyl of Roses an ounce and half, with a little Rose-vinegar,* stir them in a leaden mortar, and make it a soft Oyntment, *with Oyl of Roses.* It is sufficient to cure the Ulcer, if you apply these two once a day, at first there will come forth a slimy, white, thick matter, which must be dayly wipt away till the Cure is by Gods assistance compleat.

The Cure of a simple Anthrax or Carbuncle pestilent.

A Carbuncle or Anthrax if it be not pestilent, weakneth and is difficult and dangerous, when it is near the Heart, when it is dry or sends out venom and not matter, with great Inflammation. A pestilent Carbuncle destroys by the pestilent Feaver which goes with it, and hurts the Joynts, and destroys if it be in the noble Parts.

For cure of both, cleanse the whole Body, and use alterers when it is pestilent, look to the Feaver rather then the Carbuncle, and let blood according to the part it is in: As we shewed in pestilent Feavers. In other Carbuncles bleed and purge in respect of the Plethory, and Cacochymy, and Inflammation to revel and derive. Use coolers agreeable to the Feaver; and Cordials inwardly and outwardly, and a refreshing Diet, and cause sleep if it be wanting, though in a carbuncle it is forbidden least thereby venom should be drawn to the Heart; but by heat external and sweat in time of sleep, we see the contrary that the heat goes outward: Therefore keep them not from sleep, as is usual.

When a Carbuncle is not pestilent, we use Topicks to repress the Inflammation; when it is we attract the Venom, we open and ripen it in both cases, and then cure it as an Ulcer.

In an Anthrax not pestilent we only lay Repellers round about where the Inflammation is, and that at first; such as are in Phlegmon mentioned, as the Defensive of Bole, and that of Juyces or the Oyntments, as that of Cerus.

Or we use the Emplaster of Arnogloss to cool and concoct at first, or all along the Cure, it is made of Plantane, Meal of Lentils, or brown Bread, adding Galls at first to repel more, and to concoct more, Meal of Orobus, and Beans, and Honey.

In a pestilent Carbuncle at first we attract poyson, as in a Bubo pestilent as we there shewed; with a Cock cut in two, or a Pigeon, or Frog, or Toad, or with the Rump of a Cock or Pigeon; after the part is scarified, or with Cupping-glasses, or Horsleeches, or with the mouth of a desperate Fellow to suck it, or with the Instrument by which Womens breasts are drawn.

We open both sorts of Carbuncles to let out the venom or humor at first, by scarifying and in the progress, especially when it waxeth black with deep cuts, least they gangræne, which will cause death, and wash them with salt Water.

We

We alſo uſe Cauſticks to attract the venom, in both. And when it begins to corrupt, we uſe an actual Cautery with Gold, or Steel: or potential, as in Impoſtums, as the part of *Galen*, or Cantharides. It is uſual to lay Sublimate or Arſenick upon it, in the middle of a plaſter with a little hole in it: Or take *four grains of it with a ſpoonful of the white of an Egg well beaten*, and ſo touch the Carbuncle therewith.

We Maturate or concoct it both, as ſoon as the fleſh where it is, begins to corrupt, ſo that a part of it being turned to matter, where it is joyned to the ſound fleſh, the reſt may come forth whol, or by piece meal. You muſt chooſe things for this, that are proper againſt poyſon or malignity.

As Scabious and Comfrey of both ſorts, which are chiefly commended: After them Mullein, Dogs tongue, Mouſ-ear, Yarrow, Horſtayl, Shep-herds purſe, Goats rue, Coleworts, Althæa roots and Lillies. And according to *Dioſcorides* Motherwort, Savin, Cypres, Privet, Hercules, Panax ſtampt and applied with Salt, or their juyces,

Alſo Garlick, Leeks, Lilly roots and Radiſhes, Rocket, Water-creſs, Nettles with, Salt and Pepper.

Alſo Pomegranates ſliced, and boyled in Vinegar, and bruiſed, do take off putrifaction and malignity from a Carbuncle.

Or the ripe berries of Herb-true-love, cut or bruiſed, are good in the plague, and ripe olives dryed are good in both.

Or dried Figs, or Rayſons, or kernels of Wallnuts, or ſmal Nuts, which are rotten with Salt and Leaven.

Dioſcorides commends Rayſons and Rue, with Honey and Pitch, to take away the Carbuncle round about.

The yolk of an Egg with a dram of Salt, doth the ſame, to which you may add Honey, Figs, Meal, and juyce of Scabious: or diſſolve the yolk well ſalted in Vinegar and other proper juyces.

A convenient plaſter: Take *two cloves of Garlick, Rue, a pugil, Figs four, Leaven half an ounce, Salt a dram and an half, Pepper half a ſcruple*, ſtamp them.

Or thus: Take *roots of wild Cowcumbers or Bryony two ounces, ſal Niter a dram, the Gall of a Hog a little dryed half an ounce, meal of Lupines a dram, with Turpentine.*

Another: Take *Muſtard ſeed half an ounce, meal of Lupines, or Orobus two drams, Figs an ounce, Gum Ammoniack diſſolved in Vinegar three drams, with Turpentine.*

Alſo the dung of Hens, Pidgeons, Sparrows, Sheep, Oxen, are good to ripen alone, or with Honey, Vinegar, meal or yolks of Eggs, or Leaven: Somtimes we mix Soap, Dung and Vinegar. If you will uſe mans dung, which is ſo highly commended, let it be dryed and mixed with the reſt.

Alſo ſoot of the Chimney, Leaven, yolks of Eggs and Salt are good, or Charcole of oak. Or this oyntment: Take *Allum two drams, ſal Gem half a dram with Honey.*

Or uſe Niter and Turpentine.

Or juyce of plants mentioned, as Scabious, Comfrey, Mullein with meal, or yolks of Eggs.

Or oyl of Nuts, or Roſes with Salt, Honey and Vinegar.

Or Gum Ammoniack diſſolved in Vinegar with oyl of Lillies and Wax, diſſolves a Carbuncle and draws out his poyſon.

Or you may uſe Treacle or Methridate alone, or in a roaſted Onyon, or with other herbs, to draw out poyſon in the Plague, or to ripen in both.

Some affirme that the Saphire ſtone bound upon the Carbuncle, doth good.

They ſay alſo that if you bind Scabious bruiſed to a ſound part, and lay *Athanaſia* upon the Carbuncle, it will remove where the Scabious is.

The Ulcer left after a Carbuncle, ſhall be cured as other Ulcers.

The Cure of Herpes miliaris and Eſthiomenos.

Herpes miliaris ſomtimes goes away of it ſelf, by drying up, or with little help, as faſting ſpettle, as alſo *Phlyctenodes*. *Eſthiomenos* is more hard to be cured, and through neglect turns to *Impetigo* or *Pſora*.

The cure of theſe coming from a Cholerick, Salt and ſharp humor, is much a like, As for Evacuations they muſt be ſuch as purge thoſe humors that cauſe them. Firſt gentle to drive out the Excrements, and then ſtronger to purge the blood of its filth. Theſe are to be given by way of prevention to them that are ſubject to theſe Diſeaſes. The forms of them are mentioned in Cholerick diſeaſes and Fevers, and we ſhal ſpeak more of them in the ſcab. As for Blood-letting it will not be neceſſary, except other Circumſtances invite.

We correct the heat and ſharpneſs of humors, by alterers mentioned in Fevers and with good Diet, and we uſe Topicks in both ſorts of Herpes, from the beginning, which are very dry, and cool the ſharp humors. By which a miliaris is eaſily cured, and ſome times *Eſthiomenos*, but if it creep on, we uſe ſtronger dryers and things that cleanſe the foul fleſh, or eat it off from the ſound, that it may no further corrupt it,

To dry and abate ſharpneſs, uſe Plantane, Polygonum, Agrimony, Shep-herds purſe, Bramble leaves, Privet, Vine leaves, Nightſhade, wild Lentil bruiſed.

Or thus: Take *Agrimony, Plantane, or Myrtle, or Olive leaves two handfuls*, ſtamp them, add *Sumach and Pomegranate peels, of each an ounce and an half; Barley or Lentil meal two ounces*, boyl them in *ſharp Wine, or Wine and Vinegar*, bruiſe them for a Cataplaſm.

Or uſe the Emplaſter of Arnogloſs, or Lambs tongue mentioned in Carbuncle with Galls, Pomegranate peels, round Birthwort in *Herpes Miliaris*, or them of the three Pomegranats,

Or uſe the juyces of the plants mentioned, or of pomegranats alone, or with the fourth part Vinegar, or the diſtil'd waters of them, with Roſe water and Vinegar, with *two drams of Camphire*, to half a pint.

Acacia and *Hypociſtis*, diſſolved in *Juyces or Vinegar*, do dry and aſtringe excellently, and hinder creeping.

Or the liquor that comes from green wood while it burns, as from Vine or Oak, to which you may add other dryers.

Theſe following dry more: Take *juyce of Plantane, Polygonum four ounces, Vinegar an ounce, with Barley meal*, make an Oyntment.

Theſe dry better, if inſtead of meal you add *the pouder of Galls or Pomegranate flowers two drams, Bole half a dram.*

Or thus: Take *juyce of the herbs mentioned with Vinegar, Oyl of Roſes and* Myrtles, *of each four ounces*; let them boyl till the juyces be conſumed, then add *the pouders mentioned, or of Pomeganate peels, or Acron cups, of each two drams; Birthwort a dram, and with Wax* make an oyntment.

In *Eſthiomenos* to dry more and keep it from creeping, uſe this: Take *the juyces mentioned with Oyls*, boyled or not, for juyces are ſtrongeſt then, add *Litharge half an ounce, Tutty burnt and waſht, Lead, Antimony, Bloodſtone, Cadmia, each two drams; burnt braſs, or ruſt of Iron and Aloes, each a dram; Coral and Spodium, that is burnt Ivory*, ſtir them in a Leaden mortar with the *juyces* and *Oyls*, and a little *Turpentine*, or if they be boyled, add *a little wax* for an oyntment.

A ſtrong cleanſer: Take *juyce of wormwood, Celandine the great, or Pellitory, or Elicampane, or of Rue three ounces, Myrrh two drams, Frankincenſe half an ounce, Salt a dram, with meal of Lentils*, make an oyntment; or with *meal of Lentils, Beans, or Barley, or an ounce of Oyl Omphacine*, to take away putrefaction more powerfully.

Or thus: Take *Litharge two drams, Sulphur two drams, Niter or ſal Gem a dram, Verdigreaſe half a dram with Honey*, make an oyntment.

Or

Or make an oyntment of Allum and Wine Lees.

Or use Ink to dry, because of the Allum, Vitriol and Galls.

Or *Pamphelygos*, white oyntment of *Rhasis*, with dryers, as Allum, Niter.

Or wild Goats dung, as *Dioscorides* prescribes, or Cow dung with Wine and Vinegar.

Or pouder of the heads of salt-fish, as Herrings, or wooll and Leather, and pine tree bark burnt to a pouder dry well, when they are sprinkled upon a Herpes or Teter or mixed with oyl.

Or: Take *two drams of those burnt pouders, roots of round Birthwort, Pomegranate flowers, Myrrh, each a dram; Olibanum a dram and an half*, sprinckle it upon the Teter, first rubbing it, and anoynting with *Oyl of Ash tree. Dioscorides* commends the pouder of Snayl shells.

A good fomentation for both sorts of Herpes or Teter is a distil'd water of Dock roots sliced and steep'd in Vinegar a day or two, or of Citron peels with Allum.

Or thus: Take *of plants mentioned three handfuls, with myrtle leaves or Olive, Dock roots or Birthwort, each an ounce, Pomegranate peels and Galls, each six drams; Lupine seeds an ounce, myrtle seeds half an ounce, Acacia, Hypocistis, each six drams*; boyl them in *Forge water* with *a little sharp wine*, to wash the *Herpes Esthiomenus*, add *Frankincense and myrrh, to clear se more, half an ounce.*

Or wash with Lye and old Wine, wherein the things mentioned have been boyled.

Or with Vitriol dissolved in Vinegar and Water.

Or: Take *Sublimate a dram and an half, Litharge two drams, Borax half a dram, Camphire a scruple*; boyl them in *two ounces of proper water* and wash the Teter: or we stop the eating thereof with things that shall be mentioned in corroding Ulcers.

Or: Take *Dock roots three drams, great Celandine a handful, Allum, Sulphur, each an ounce; Salt a pugil with Wine and Vinegar*, boyl them and let the vapor be received, so that it touch the Tetter.

Or apply plates of Lead after the Tetter is anoynted and steep them first in Vinegar, Salt, or Allum water.

In the Tetter called *Esthiomenus*, it is good to rub it til it bleed. And then the clensers appled, will work the better.

Or burn of the corrupt flesh, with an actual or potential Cautery, as in Carbuncles.

The Cure of the common Scab, Itch, Scald, Terminthus, Epinyctis, Impetigo, Prurigo, Psora and Greek Leprosie.

The Scab is of many sorts, as the moist Scab, which is either ordinary, or fierce, spreading, as *Tinea* or Scald, *Terminthus, Epinyctis*: or the dry Scab, as the Itch called *Prurigo, Impetigo*, or *Psora, or Greek Leprosie*, we shall speak of the Cure of all together, in the Cure of the Itch. The *Phlyctænæ* are blisters, when the scarf Skin is seperated from the true, and are cured as the corrosions of the Skin.

Of moist Scabs the vulgar is most gentle and easie to be cured, but when it often returns it is stubborn, and if not cured will turn to a worse sort. The next called *Fera* is worse, but curable, and if neglected, it turns to a worse sort. That which is worst is called *Manans*, or spreading, it is difficult to be cured, and is infectious in Children, and deformeth the Hair by eating it off. The *Terminthus* and *Epinyctis* are easily cured. Among the dry Itches *Prurigo* is easiest to be cured, and *Impetigo* more hard, and *Psora* is most difficult, and they are turned from one into another if neglected, and easily return in Spring and Fall. And at length they turn to the Greek *Leprosie*, which is incurable, though it cease, it will return with an ugly crust consuming the patient and itching. And it is taken for the *Elephantiasis*, by them that cannot distinguish.

Also those may be cured alike, as for general helps, Evacuations and Alterers, because they come from Cholerick, salt, sharp and malignant humors (as in the Causes) they must be purged, and let blood, and the alterers must be greater or less, according to the disease, with respect to the constitution, and the Excrements abounding, as followeth.

In the moist Itch you must let blood, if Age or other things forbid not, because the Anticedent cause is salt serum, which is cholerick and sharp in the blood, and this will partly come forth by bleeding. Which must be rather done, when there is Plethory or fulness, which causeth pustles. The Vein opened must be for general or particular Evacuation of that Member, which is most infected. In the dry Itch, though there be not such moist pustles, yet because the blood is very unclean, you must bleed also, especially if the skin be red, as in *Prurigo*, which shews heat. This must be done before purging often, and every month you must Cup and Scarifie, or apply Horsleeches. And the Terms and Hæmorrhoids must be provoked, in them that are used to them, as we shewed in the want of them.

In all kinds of moist or dry Itches, you must purge often, when the body is foul, and in *Psora*, which is worst, if every day, or every other day, for a long time, especially Spring and Fall. And this must be by fit Medicines, that purge cholerick, salt and sharp humors, from the Guts and Meseraicks and so from the Mass of blood, adding alwaies things that resist sharpness of humors. And choosing such as inflame not the body too much.

These purges are to be found in other diseases of choller and melancholly stronger or weaker. Especially in intermitting feavers and continual putrid. As well such as are prescribed before bleeding to cleanse the Excrements in the belly, as strong purges, and the preparatives to be taken before them. As that Apozem mentioned in a Synoch with Erysipelas, and the purges prescribed against Melancholly: or these.

Let them drink whey morning and evening, especially of Goats Milk, so much as may purge, this is pleasant for Children.

Or dissolve some pleasant things therein, as Manna or syrup of Roses, or Violets, or of Peach flowers; with a little Diagredium, if need be. Or give some other purging syrup therein, that may be taken.

Or give of Roses, Fumitory, Hops, and of Bugloss, Docks and Apples.

Or make a little at a time, because it will soon decay, as of whey or old Cock broath two pints with Mercury, Beets, Fumitory, Hops, Elder flowers or Danewort buds, Senna, Polypody, Epithymum, Damask Roses, with a little Sugar or Honey.

Or give usual syrups to purge unclean blood, as the gentle syrup of Roses, Violets, Peach flowers, made of their infusions or juyces with Sugar or Honey. Juyce of Fumitory, or Hops, or Mercury, or Rhamnus solutive, or the juyce of its berries. Thus: Take *the grains, or seeds of the dryer thorn called* Merla, through ripe, bruise them, and keep them in an Earthen vessel eight daies warm: take *a pint of the juyce and as much fine Sugar*, mak a syrup with *Cinnamon and Ginger, of each six drams; Cloves two drams.* This syrup, is not good only for Scabby people, but Gouty, and such as have flegmatick and serous humors.

Or give syrup of Roses with Rhubarb, of Eupatorium with Rhubarb, of Apples by King *Sabor*, of the juyce and Senna, or that of Fumitory, Epithymum, Polypody, Myrobalans, Tamarinds, Cassia of Epithymum compound: or that of Fumitory, Myrobalans, Tamorinds and Agarick, of Succory with Rhubarb: of Diasereos, and the like.

Or that of Apples and Hellebore. Thus made: Take *Bugloss and Borage roots and all, each two handfuls; Fumitory, Eupatory, Chamæpytis, or Groundpine, Germander, Maidenhair, each a handful; Bugloss, Borage and Stæchas flowers, each a pugil; Raysons stoned an ounce, tops of Time*

and Epithymum, each half an ounce ; Senna an ounce and an half, Polypody two ounces, black Hellebore steept in white wine three drams, Schænanth two drams, boyl them, and add to the straining *Juyce of sweet Apples twelve ounces, Sugar two pounds* make a syrup.

Another by *Monsanus* made of *Senna, Rhubarb, Myrobalans, Epithymum, Polypody, bark of black Hellebore six drams, with an ounce of Cloves, and four ounces of Liquoriſh boyled to five pints.*

Or this purging Decoction for five or six doſes. Take *Dock roots three ounces, Graſs, Aſparagus, Kneeholm, Elicampane, Liquoriſh, each an ounce and half ; Fumitory and Mercury two ounces, Polypody four ounces, Succory, Dandelion, Sowthiſtle, Bugloſs, roots and all Scabious, Fumitory, Hops, Mercury, Maidenhair, Eupatorium, Endive, Liverwort, Sorrel, Violets, Lettice, Balm five or six handfuls, Cordial flowers, Water-lillies, Moulin flowers four pugils, Budds of Hops tops, of Thyme and Epithymum, each a pugil ; Aniſeſeed two drams, Seeds of Dodder, Melons and Sorrel, each a dram ; Carthamus bruiſed three ounces, Raiſons ſtoned two ounces, Prunes ſix pair, Sebeſtens or Jujubes eight pair, Tamarinds an ounce and half,* infuſe the Seeds and Roots in a pint of white Wine, then add as much Water with a little of the Decoction of Lignum vitæ, or Wormwood-water. boyl and ſtrain, ad ſugar and Cinnamon, give it often as Iſhewed

If you will have it work more, infuſe *three ounces of Senna or four,* or make it into a ſyrup, *with half a pound of Sugar,* give it as you find it works, or mix it with *Water of Bugloſs, Fumitory, Maidenhair* or the like, or with *Pulp of Caſſia or Tamarinds* make an Electuary, you may add alſo Diagredium to make it ſtronger.

You may alſo boyl Soldanella, with the Decoction of Senna or for the ſtronger people, *three or four drams of black Hellebore,* and add *an ounce of Myrobalans* at the concluſion, rub'd with *Oyl of Rhubarb, or Agarick, or Mechoacan,* with their Correctors, and after ſtraining, add *Sugar* to make an Apozem or Syrup, and it will be better.

Or add to the Decoction Syrup of Fumitory, Docks, Hops, Apples, Bugloſs, Roſes ; or take a good quantity of the Juyces of them, and infuſe therein Senna, Rhubarb, Agarick, or make a Syrup.

Or, Take *Juyce of ſweet Apples four ounces, Juyce of Roſes three ounces, Juyce of Fumitory and Hopps, each two ounces ; Juyce of Dock roots and Beets, each an ounce and an half ; Juyce of Mercury, Borage, Bugloſs, Sorrel, each an ounce ;* boyl them with as much *Sugar* and with *Cinnamon* make a ſyrup : You may if you pleaſe add *Senna* and *Rhubarb.*

A purging Wine for five doſes. Take *Dock roots, or Monks-Rhubarb two ounces, bark of the Roots of Tamarisk, or Aſh and Danewort, each an ounce ; Fumitory, budds of Hops, Mercury, Agrimony, Maidenhair, Wormwood, each two drams ; Peach, and Cordial flowers, each a dram ; Aniſeſeeds two drams, Senna two ounces, Thyme, and Epithymum an ounce, Mechoacan, or Briony roots half an ounce, Ginger a dram,* bruiſe them for *five or ſix pints of Wine,* and ſteep them therein, you may ad *Sodanella* and a little *black Hellebore,* which is ſafeſt in Wine.

Or, Take *eight meaſures of new Wine,* add *twelve ounces of Senna, Mechoacan, Sarſa, Saſſaphras, each three ounces ; Wormwood two handfuls.*

Another Decoction for other Diſeaſes, and the Scab to be taken thirty dayes, it prevents and cures. Take *Guaicum an ounce, Sarſa ſix drams, Roots of Succory and Liquoriſh, each half an ounce;* boyl and ſtrain them, and for one doſe infuſe *Senna half an ounce, Mechoacan a dram, Ginger half a dram,* ſtrain and add *Syrup or Juyce of Roſes half an ounce, Balm water an ounce :* Give it at once.

An Infuſion or Decoction of Hellebore is good as in other ſtubborn Diſeaſes, made of the ſmall Roots of Hellebore, that which is called *black Aſtrintia,* or that with a green or purple Flower, which are greater then the white Hellebore, though this may be uſed in ſtrong Bodies, take off the Bark and caſt away the Pith, which may be ſoftned in Wine, if it will not come off. Take *a dram or four ſcruples of this bark, two drams of Senna,* infuſe them in *wine or Oxymel,* if it be *white Hellebore or Aniſeſeed water,* add *Cloves, Cinnamon, Ginger,* boyl gently, and ſtrain them, add *the Decoction, or Raiſons, and Prunes, or Syrup of Polypody, or of Roſes.* Or you may make *an Extract of black Hellebore* by often Infuſion, and give a little thereof.

A certain Emperick cured all Scabs and other ſtubborn Diſeaſes, with the Decoction of Stibium calcined and Sarſaparilla.

You may alſo uſe Potions and Electuaries, as of Tamarinds, Caſſia, Manna, Lenitive, Diacaſſia, Diaprunis, Diacatholicon, or ſtronger with Scammony, as Diaprunis ſolutive, Diaſebeſten, of Juyce of Roſes, Diaphænicon, Troches of Violets, or Electuary of Lapis Lazuli, Confectio Hamech, Diaſenna, Pills of Fumitory, Agrimony, Rhubarb, and Pills of Lapis Lazuli, or of the five Myrobalans.

After Purging ſweat to ſend out the ſharp Humors in both moiſt and dry Itch, for though it dries the Body more, yet it takes away the cauſe. For Nature in Impetigo and Pſora tends that way, as we may obſerve.

Therefore uſe not only hot Houſes often, but when the Itch is ſtubborn and returns, continue them a month, with Decoctions of Guaicum and Sarſa as in the Pox, but not with ſuch ſlender Diet, leaſt by drying the Body within, you ſharpen the Humors, alwayes Purging every third day, by which we have often cured them.

Uſe Alterers to amend the Conſtitution, and a ſparing Diet, but not ſo as to exaſperate the Humors. Let the Diet be of good Nouriſhment, temperate and moiſt rather then dry, and cold rather then hot. Take heed of ſalt, ſharp, and ſpiced Meats, and Wine that inflames the Body too much. Let the Air be good, the ſleep temperate, and let them exerciſe often to breath out the Excrements by inſenſible Tranſpiration.

Medicines muſt be given to alter the ſharpneſs of the humors that are cold and moiſt, to correct the Diſtemper of the Liver, and open Obſtructions : As Conſerves, Candyes, Syrups, Waters of Bugloſs, Violets, Roſes, Succory, Water-lillies, Maidenhair, Citrons, Pouder of Trionſantalon, and Diarrhodon : And others mentioned in hot and melancholy Diſeaſes. Alſo give ſharp Spaw-water for many dayes ; or Troches of Vipers, with Conſerves in Pſora and Elephantiaſis, and a dram of Gum Lac, with three ounces of the Decoction of Myrtles, is good to preſerve againſt Impetigo.

Many in Pſora and other ſtubborn Scabs, uſe Chickenbroath, and Vipers fleſh boyled therein, and made into balls, with Crumbs of Bread, and gilded with Gold.

Let the topical Remedies be ſuch as draw out the Humors faſtned in the skin, and abate their ſharpneſs, and diſſolve them, and that purge the skin from matter, cruſt, ſcurfe and ſcalds ; and heal it, and take away the Inflammation. They muſt be drying, and cleanſing, and healing, mixed with cold and ſharp things, in both moiſt and dry Itch, to abate cholerick and ſharp Humors, and Itching and Inflamation ; as in the vulgar Itch, or that which is called *Feta,* or *Cruel,* or *Terminthus,* or *Epinyctis.* Alſo add Emollients to take away the Scabs in the wet Itch, and the ſcurfe and ſcalds in the dry. Thus ſcratching is delightful, till the skin be torn to let out the itching Humor, but it ends in tearing pain ; and though it ſo hurteth, and is the firſt cauſe of the ſcab breaking out, yet becauſe it allayeth the Itch, and brings out the Humors, it is not amiſs, if it be with diſtinction of the parts, and not ſo much in ſome places as in others.

Baths are much uſed againſt the Itch, both natural and artificial, dry and moiſt ; and if it be in a particular part, they muſt be uſed to that alone.

Among Natural Baths it is good to ſwim in freſh water, which allayes the Itch by its coldneſs, and mollifies the ſcurfe by its moiſtneſs, and by its earthy quality, which I ſhewed in the Cauſes of the Stone, to be in all Waters, it dry-

dryeth. And the rather if the Water be muddy, or have any chalk like ſubſtance in it when it is boyled. Such are in divers places, although they are ſweet and ſeem pure and clear, and are good againſt other Diſeaſes as well as the Itch. Hot Water doth all things better, if the Patient continue long in it and go in often, for thereby the Humors are better drawn forth and purged; and by the uſe of it not only the ſmall Itch but the ſtubborn Scab, hath been often cured.

Sulphur-waters or ſuch as are ſalt or ſharp, which by the bitumen ſwiming at the top, and by their ſcent declare they are from Minerals, are the beſt baths. That of Sulphur which is hot upon which Bitumen ſwims like greaſe, is beſt againſt all ſorts of Scabs, becauſe it dries cleanſeth, and digeſts, and mollifies by its fat, therefore it is good againſt dry ſcabs as the laſt remedy. Salt Waters hot or cold are beſt for the moiſt ſcab, for they dry ſtrongly. And all other Mineral Waters are good.

Or Artificial Baths, ſuch as are called dry or hot Houſes to ſweat in, by which the humors that cauſe the ſcab ſweat out with the ſerum, which takes away the ſcab by its moiſtneſs, and the heat dries up the Excoriation. Theſe do it alone ſomtimes, but moiſt baths or other applications when the Pores are opened, do better being joyned therewith.

You may make moiſt Baths to ſit in. to cleanſe, dry, mollifie and cauſe ſweat of Herbs, Roots, and all, as of Docks, Scabious, Elicampane, five leaved Graſs, Snakeweed, Tormentil, Plantane, Fumitory, Moulin, Fern, Dwarf-elder Mugwort, Dill, Oak leaves, Ivy, and Willow tops: tops of Briony, Dragons, or Cookowpints, wild Cowcumbers, and to dry more, of Sorrel, Soapwort, Pellitory, Beets, Mallows, Borrage. Marſh-mallows, Lillies, Organ, Sage, Chamomil, and Roſemary flowers, Beans, Peaſe, Vetches, Lupins, Barley, Bran Fœnugreek, Gourd and Lineſeed, and the like. Boyled in freſh Water, or Salt, or mineral Water, adding Lye, or Smiths Forge-water, or Sulphur, Salt, Allum, Vitriol, Tartar burnt, Gypſum, Bole, and the like.

Thus: Take *Lapathium, and Briony roots a pound, Elicampane four ounces, Dragons, or Cookowpints two ounces, Scabious, Plantane, Fumitory, Pellitory, Mallows ſix handfuls, Bean and Lentil meal four pugils, burnt Gypſum a pound, Sulphur half a pound, Salt four ounces,* with Water to fill the Veſſel, boyl it and add Lye.

In a dry Itch when by uſe of Oyntments the skin is dry. Take *Mallows, Violets, Docks, Beets, roots and all, Pellitory, Scabious ſix handfuls, Line, Fœnugreek, Bran. Pompion ſeeds an ounce or more, Chamomil flowers three pugils, Brimſtone a pound,* boyl them.

Another for the ſame. Take *Sulphur two pounds, Salt a pound,* powder them and mix them with *two pints of Oyl,* boyl them gently, put them into a hot Water for a bath, let him ſit and ſweat there, and after that ſweat in his bed, do thus three dayes, and be cured.

It is good once or twice a day to rub and anoint before and after bathing, the Pores being open.

Rub the Body with Dock roots boyled in Vinegar, in both Itches; or bruiſe Dock roots, with Salt and Vinegar, and rub in the bath therewith, that he may be waſht after this is a common remedy.

In Impetigo uſe Briony and Gentian roots, after the ſame manner, with Dragons and Cookowpints.

Or ſtamp theſe Plants, Roots and all, with Vinegar, Salt and Brimſtone, as Elicampane, five leaved Graſs, Snakweed, Tormentil, Alkanet, wild Cowcumbers, Daffodil, Coleworts, Bugloſs, black Charlin, Crowfoots, black Hellebore, Plantane, Scabious, Fumitory, Agrimony, Elmleaves, leſſer Celandine, and againſt Itching, uſe Potamogetum and Mercury.

Add Meal of Lupins, Darnel, Peaſe, Barley, Juniper, and Bay-berries; or wild three leaved Graſs, and Watercreſſes, with Honey according to *Dioſcorides*. Or Coriander, Wormwood, Rue, Cowcumber leaves, and Leeks, Rhus, Coleworts and Plantane, with Bran, Raiſons, Honey, againſt the Epinyctis.

Or an Apple called *Adams-apple* cut in two, ſprinkled with ſulphur within, and then roaſted in brown Paper under the Embers, is good to rub with, or an Orange.

Muſtard-ſeed, Turnep, Rocket, Nigella, Staphiſager, Briony, Tamariſk, with Vinegar and Oyl, or Glans unguentaria, with Urin or ſeeds of ſunflower, are uſed by *Dioſcorides* againſt Epinyctis.

You may rub the Plants mentioned, adding Greaſe, as with Dock or Gentian roots, bruiſed or boyled with bitter Greaſe, Oyl of Bayes, and Ginger.

Or, Take *Roots of Docks, Elicampane or the like, two ounces, Dragons, or Cookowpints two drams,* ſlice and boyl them *in Vinegar,* bruiſe and add *Hogs greaſe, or butter three ounces, with Salt and Brimſtone.* If you add *a little Quick-ſilver or Sublimate,* it is excellent in Impetigo and Pſora.

Or, Take *Roots of black Chamæleon two ounces and half,* bruiſe them with *fine Hogs greaſe, or Oyl three ounces,* add *Sulphur half an ounce, Allum two drams, Vitriol a dram.*

Or boyl a pugil of Juniper-berries, and a ſpoonful of ſalt bruiſed in fine Hogs greaſe or Oyl, and ſtrain them for an Oyntment.

Or uſe Juyces of Herbs mentioned, or of Mercury Xyris, Agrimony, Southernwood with ſalt, ſulphur and Vinegar; or Juyce of Oranges, Lemmons, Citrons, Oyl omphacine and Acacia or Juyce of Sowbread, Thapſia, Fig milk is uſed by *Dioſcorides*. Juyce of Henbane takes away Itching

Or Vinegar made of the Infuſion of Oleander, Olive-leaves.

Aloes diſſolved in Vinegar is good againſt Impetigo.

Storax with Vinegar and Oyl of Roſes, cures the ſcab.

Or Turpentine, or Gum Arabick, of Plum-tree, Almonds. Vines, with Vinegar and Oyl.

Dioſcorides applies Bird-lime, with a pledget to the Epinyctis.

Or the Water that comes out of burnt Olive or Cornil-tree, or the Tears of Vines, when they are cut off, or pruned.

Or ſheeps or Goats dung with Vinegar, cures the Epinyctis according to *Dioſcorides*.

Or the Gall of an Ox, or Blood of a Gooſe, takes away itching.

Or faſting Spittle, the Herpes and Impetigo.

Or Oyl of Yolks of Eggs, or Wheat or Nightſhade-berries, or Oyl in which live Coals have been quenched. *Dioſcorides* commends Oyl of Cedar, or wild Olives, and Oyl of Rocket, Tamariſk, Aſh, Juniper, or Oyl of Henbane ſeed, Populeon oyntment. Some uſe Petroleum in the Scab *Terminthus*, or Oyl of Tartar, with a little Oyl of Vitriol.

A Liniment uſual againſt the Itch. Take *freſh Butter, or Oyl of Roſes four ounces, Turpentine diſſolved with Yolks of Eggs two ounces or three, Salt ſix drams,* mix them well, you may add *Sulphur,* or which ſtinks leſs, *ſix drams of Ceruſs, or an ounce of Juyce of Oranges or Lemmons.*

Or, Take *Oyl of Roſes, Violets, Nuts, Lineſeed, Lillies, Bayes four ounces, Juyce of Docks, Scabious, Plantane, Fumitory, Oranges, Lemmons, with a little Vinegar four ounces, Turpentine three ounces, Salt ſix drams*: Or boyl *the Oyls and Juyces* till the Juyces be conſumed, and with *Turpentine* and *Wax* make *an Oyntment*, but the firſt is better.

Or make an Oyntment of Sulphur and Litharge, Oyl and Juyces aforeſaid; or with Juyces and Vinegar without Oyls.

Or uſe the common Oyntment of Litharge or Ceruſs, made of Oyl and Vinegar, or without Vinegar; or uſe Unguent of Roſes, or white Oyntment, with Camphire, adding Litharge and Sulphur.

You may quickly make an Oyntment of Gun-pouder which conſiſts of ſulphur, Niter and Charcole, with Oyl or Greaſe: This is the ſoldiers Oyntment againſt the Itch.

Or,

Or: Take *Litharge, Sulphur, of each six drams; roots of Dragons or Cookowpines two drams*: mix them with the former Oyntment, *And half an ounce of Storax.*

Or: Take *Ceruss, Tuzzy or Pompholyx, or Cadmia, Litharge, Bole or Chalk, each two drams; Sulphur three drams, Tartar a dram and an half, Gum Sandrack or Sarcocol or Mastick, each a dram*; make a pouder with *burnt Lead and Antimony* and mix it with the oyntments mentioned.

In a stubborn Itch, add *Chalcitis or wine Lees burnt half an ounce, or a dram of Oyl of Tartar, a scruple of Oyl of Vitriol, or half an ounce of Quick-silver*, dissolved with *Turpentine* with is excellent, or as much *Sublimate.*

Oyntments for Rich and dainty people, are made of Unguentum Citrinum, which makes the skin fair, and it is best in the face: and *Lac Virginis.*

Or: Take *Ceruss half an ounce, Borax two drams, Tartar a dram and an half, Gersa Serpentaria a dram, Frankincense, Niter, each half a dram; with juyce of Limons*, make an oyntment.

For the worst Itch: Take *Calcanthum, or Misie, or Chalcitis each half an ounce, scales of Brass two drams, or Verdigreese half a dram, Allum three drams, Sulphur an ounce, Aloes, Frankincense, Myrrh, each a dram and an half; Acacia a dram, with infusion of Gum Arabick in Vinegar. Galen* adds *Annerca or Lees of Oyl and Rosin.*

In Tinea, which is the spreading scab or scald: Take *Tartar, Niter and Allum, each half an ounce; Litharge an ounce, Sulphur vive six drams, Gersa Serpentaria two drams, Orpiment two drams*, pouder them, and with *Soap and juyce of Docks or Sowbread*, make an Oyntment.

Or: Take *Litharge an ounce, Allum, Niter or sal Gem, Tartar and Sulphur, each half an ounce; ashes of Nuts with the shells and Garlick burnt, each three drams; Soot* whose blackness doth no hurt to the Hair, *two drams, both Hellebores and Staphisagre, of each a dram*; make a pouder, and with *Honey, strong Vinegar, and three heads of Garlick and two drams of Ivy or juniper berries*: make an Oyntment.

Or with Oyl of Nuts, Juniper or Bayes, and if you boyl the Oyls with juyce of Garlick, Centaury, Docks, Oranges and Vinegar, to the consumption of the juyces, it will be stronger.

This Oyntment for a scald Head will be stronger, with *half an ounce of Quick-silver*, dissolved in *Turpentine or with Cinnabar, or red Lead, or with red Chalcanthum, or Chalcitis, or yellow, which is called* Misy, *or three drams of Verdigreese, or a dram of Orpiment, or Sublimate*, and if they be mixed with the Oyntment made of Honey and Vinegar without Oyl, it will be stronger, because unctious things abate the force.

Many scald Heads have been cured with this: Take *the Oyntment that Carters grease their wheels with, called in Dutch* Rarensalve, *a pound, leaves of dryed Savin an ounce and an half, Bay berries half an ounce, white Hellebore two drams, sulphur an ounce, Quick-silver half an ounce*, dissolve it with *Turpentine*, and make an Oyntment.

Add the ashes of a Hedghog, or Hippocampus, or ashes of Juniper and Ash, pouder of Earth Cimolia, Adarces and Cardamom and Camphire, they abate the Itching.

To take away the stink of the Brimstone and the rest, add Storax liquid, or Oyl of Spike, or Juniper, or pouder of Orris.

Or let it be made with flower of Brimstone and besides Storax, add flower of Belzoin, which are sweet and clense and dry.

A Cataplasme for a scald Head: Take *three ounces of Garlick, Rue, Savin, Ivy, Nettles, each a handful; rosten Nuts five, Juniper berries an ounce and an half, Pigeons dung an ounce*: boyl them in strong Vinegar.

Or mix meal of Fænugreek with Pumice stone and juyce of Garlick and milk of Figs.

I have known poor people cure the scald, with the fat Earth that lies about spaw waters, laid all over the Head.

Or use pouders after you have anoynted the Head with Honey and Oyl aforesaid.

Dioscorides sprinkles on Niter and Frankincense.

Or: Take *Pumex stone three drams, Borax two drams, Sals, Allum, Chalcitis burnt, of each a dram; Frankincense and Myrobalans each half a dram; Galls, Cypress, Nuts burnt a dram and an half*: make a pouder.

You may take of the scab and the Oyntments with Decoction of five-leaved-Grass, Docks, Scabious and Meal of Lupines.

Or with the Decoction of Hens Dung, sheeps or Goats dung, adding Docks, Plantane, Agrimony, Mallows, Bettony.

Or dissolve burnt Gypsum in Forge water, it cures all scabs, for besides drying it mollifies, and the Hands will not be rough when they are washt therewith, but soft as we see when work men use it, for making Plaister.

Common Salt, or Allum, Niter, or Gem, or Armoniack, dissolved in Vinegar allaies itching, or Tartar, or burnt Allum, you may if it be too strong add water of Myrtles, Roses, Docks, or the white of an Egg, and Oyls.

Or thus: Take *burnt Gypsum a good quantity, Bole pondered three ounces, Salt two ounces, Allum an ounce, vitriol a dram with vinegar and Wine*, make them as a Lye, or boyl them, wash the mangie parts.

Lac Virginis made of Litharge and Vinegar and Salt or Allum water with juyce of Limons, Oyl of Tartar doth the same in the Face best.

For a Scald wash the Head with Lye or Forge water, wherein are boyled Mallows, Beets, Pellitory, Southernwood, Wormwood, Horehound, Centory, Bertany, Maidenhair, Savin, Bramble leaves, Pease, Vetches, Beans, Lentiles, Lupines, Fænugreek, Juniper and Ivy berries, Mustard seeds, Cypress Nuts and both Hellebors, adding Vinegar.

In a stubborn scab and Impetigo: Take *Litharge of Gold half a pound, Allum an ounce, juyce of Plantane, Docks and Limons, of each an ounce; Vinegar a pint and an half*: boyl and filter it off, it is stronger with *three drams of Quick-silver, or half an ounce of Chalcitis.*

Or boyl Litharge, sublimate, Ceruss, Vitriol, equal parts; in Plantane, Dock or spring water.

Or dissolve sublimate in Aqua fortis and mix a spoonful thereof with Rose or plantane water, try the strength first upon some part and then use it.

Or use the distil'd water of Docks mentioned in the Tetter.

Or: Take *juyce of Docks four ounces, of Plantane two ounces, of Limons an ounce, Rose water an ounce and an half, pouder of Sulphur and Salt, each an ounce; Litharge half an ounce, Ceruss two drams, Sublimate a dram.*

Or: Take *Dock roots three ounces, Bryonie, Elicampane, Gentian roots, each an ounce; Sulphur an ounce and an half, Quick-silver half an ounce, Vinegar eight ounces*, distil a water.

A Lixivium cures the scab, if it be used in time of bathing with soap, this is best in the scald, to get the scabs from the Hair and other filth. It is best made of vine and colewort ashes and of Bean stalk, juniper ash with unsleaked Lime, adding Forge water, Urin, vinegar or pickle, salt, Allum, sulphur, Calcanthum.

Or wash with stale Urin, that hath stood long in a brass pot or that which is red and is made by a cholerick person.

Some commend that Water found in the cavities of Oaks.

Or use Medicines mentioned in the Elephantiasis.

Or use a Dropax, that is a plaster of pitch laid on, and forceably drawn off, to pluck out the Hair by the roots

roots which hinder the cure of a scald Head this is the last Remedy: make it of Pitch, Rosin and oyl dissolved, one Plaster over the whol Head is better than many.

The Cure of Ulcers in general.

Excoriation, Clefts, Wounds, and Ulcers are cured alike, when the skin, flesh, and other parts divided grow again together: this is Natures only work, and the Physitian doth only remove the impediments by actual or potential means: and because Driers are chiefly used they say all Ulcers are cured thereby; but they vary according to the sorts of Ulcers, as we shal shew, first we shall speak of the cure of superficial abrasions, and Fissures, or Clefts, then of Burnings, then of deeper Wounds and Ulcers.

The cure of Abrasions of the Skin, Chaps, or Gall cal'd Intertrigo, and of Fissures or Clefts, or Perniones, Kibes or Chiblanes.

Abrasions called *Intertrigines* or Galls by Riding, long lying, Pissing in Infants and Pose or *Coryza* in the Nose, or from *Phlyctenæ*, or Bladders broken, also Fissures or Clefts, or Chinks, or chaps called *Rhagades* in the Hands, Feet, Lips, Fundament, Paps, Privities, Prepuce of Men, Eye-brows, Nostrils, Ears, come from Heat or Cold, or Drineſs, or salt and sharp Humors, as *Perniones* or Kibs and Chilblanes use to be in the Heels in time of great Cold. they are cured alike, and when Kibes turn to Ulcers, they are cured as Ulcers.

First take away that which caused them, or hinders the Cure of them, as by removing outward Causes, and clensing inward as salt and sharp Humors, and preventing their Increase, as we shewed in the Scab, if the cause cannot be wel taken away let it be abated, if it come by riding, mend the Saddle, if by long lying, lay soft things under, and if Children be gall'd by Urine, defend the part.

As for the rest of the Cure, although Nature by Nourishment wil make new skin, and glew up Clefts or Chaps, yet because the torn skin grows rough round about where it presently drieth, especially where it is thicker then ordinary, and moysture falls thereon, which hinders action, you must apply Topicks to mollify the hard and dry Circumference, and things that dry gently without biting, and moisten and so dry as it is rough or wet more or lesse, Thus.

All Suets lenifie and heat, the chief are Dears, Kids and Goats. You must anoynt a Clout and apply it.

Candle droppings are good against galling by riding, and they are better when they are dropt into Water, or white Wine, this oyntment is called *Candle-droppatum*, it is easie to be had for Travellers.

When you wil Lenifie more, use Goose, Duck, Hens Grease, or *Oesypus* which is Grease of Wool, or use Bears Grease, against Kibes or Chilblanes.

Or oyl of Roses, Myrtles, Quinces, bitter Almonds, or yolks of Eggs, for chapt Lips or Nipples, or oyl of a burnt Nutshel, or of Wheat, the oyl of a roasted Turnep cures the Chilblanes.

Or the oyl of Sowbread or Daffadil roots made hollow, and then roasted, or oyl of Nettle seeds, or of Nettles, boyled in oyl with Salt.

Or Mucilage of Gum Tragacanth in Rose-water, or of Quince seeds, or the white of an Egge, Glew, or Size, made of Leather shreds boyled, cures the Chaps of the Nipples and the Grease thereof also.

The *Valesians* use the Gum, that comes from the Bark of the Larch tree called *Drambech* in Dutch, or Turpentine.

Pomatum made of Kids Suet is Good for all Chaps, and it is sweet for the Lipps and Nipples.

You may of those sewets, and oyls, and white Wax, make an oyntment with Mucilage, and a little Turpentine.

Or make oyntment of hard yolks of Eggs, with Goats sewet, oyl of Roses, and Grease that is sweet.

Or for the Chaps of the Lips, use Honey, or Syrup of Roses, or Sugar pellets, or Sugar of Roses, or Diatragacanth frigid made into a Liniment.

To dry more use juyce of Plantane and Turpentine, with the oyls mentioned wel mixed together.

Or with Starch and Infusion of Gum Tragacanth, with other driers.

or juice of sweet Pomegranates, with Starch, and Butter; when there are Chaps in the nostrils, from *Coryza* or *Pose*, or Use the Emulsion, of the four great cold seeds.

Or Use the iuices of Comfrey, Cotyledon, Elder, Rue, made as the rest into an oynument; or juyce of Goose-Grass, against the Chaps of the Nipples, or *Acacia* against Kibes or Chilblanes.

Or Juyce of Briony with Salt, is good against Clefts.

Or leaves of Beech, or Briony, applyed to chapt Lips cures them.

Or a roasted Leek, or Onion, with honey and oyl, or a Squil or Sea onyon, with oyl or Rosin, against Chilblanes.

Or add Starch to the Mucilages, or to oyntments, of Sewet, or of Yolks of Eggs.

Or Pouder of Galls, or Turpentine, and Honey.

In Chaps and Kibes, add Ashes of Bran, Squils, Figgs Asses Hoof, Horse-tayl, Cray fish, to Honey of Roses, suets, or oyls.

Or burnt Shoe soals, or Paper with suet, or Tallow, is good, or to be added to Candle droppatum, for Galls by Riding, being at hand.

Mastich, Frankincense or Pitch poudered and mixed with oyl of Roses or Grease and Wax make a good oyntment.

Or thus. Take *Sorrel, Sarcocol, Mastich, each a dram; Gum parched half an ounce*: pouder them, and with *Oynment of yolks of Eggs mentioned two ounces*, or with that of *Mucilages* for chapt Lips make an *Oyntment*.

Sulphur and oyl mixed cure the Chaps of the Hands, or if you tie Sulphur in a Clout, or the flour of it, and boyl it in common oyl, or oyl of St. Johns wort or Moulin.

Or Litharge with the white of an Egg, or Mucilage, or oyl, or Grease stirred long in a Leaden Mortar, cures the Excoriations by Piss and other chaps.

Or mixed with the oyntments made of Juyce of Plantane: also Cerus, Tutty, Starch, and oyl of Yolks of Eggs.

Or thus. Take *Litharge, Myrrh, Frankincense, each a dram; Galls or round Birthwort half a dram, Camphire a scruple, Oynment of Suet two ounces*.

Or use the usual oyntment of Litharge, Cerus, Pompholyx, with Allum or *Unguentum Citrinum*.

When the chaps are stubborn, use stronger Driers. Take *Litharge, Cerus, each a dram; Allum, red Lead, each half a dram; Sublimate four grains*, with *white of an Egg* make a *Liniment*.

A Water for the same. Take *Tartar three drams, Allum half a dram, Sublimate four grains, Cerus, Litharge, each a dram; Frankincense, Mastich, each half a dram; Pomegranate flowers two scruples*: boyl them, mix them in twelve ounces of *Rose, Plantane, Limon*, or *Mouse-ear water* till a third part be consumed, wash therewith.

Or wash before anoynting with *Decoction of Lillies, Mallows, Henbane, Poppy, Violets, Purslane, Groundsil, Housleek, Chamæmel, Melilot flowers, meal of Fænugreek and Line seed* with *Sheeps suet*, let it be of *Milk* or *Water*.

It is good to wash chapt hands in their own Urin.

For Kibes and Chilblains foment with a Decoction in Wine and Water of sharp Herbs, as Dragons, Sowbread, Crowfoot; or Clensers, as Turneps, Beets, Orrobus seed: or Astringents, as Myrtle, Verbascum the less, Artichoke and Pomegranate peels. Also Allum water is good against Kibes and Chilblains.

Or: Take *Melilot a handful, red Roses a pugil, pulp of Quinces two ounces*: boyl and stamp them, add *meal of Len-*

ils an ounce, Pomegranates peels half an ounce; with *Oyl of Roſes, Frankincenſe and Aſhes*, make a *Cataplaſm.*

I have ſeen the thick lips in a kib'd Heel ſtitched together, that it may heal the better.

You may cure chaps in the Hands and Feet with ordinary Glew ſpread upon a Clout.

You may uſe againſt Burning, things againſt Bliſters and Excoriations from them, being broken.

Burning, whether it be from any thing red hot, or from flame, or from Gun-powder (for a Bullet cannot ſo quickly grow hot as to burn as ſome ſuppoſe) or from ſcalding water and the like, or from potential Cauſticks or Nettles the narrower and ſhallower it is, the ſooner and eaſier it is cured; if otherwiſe, it is difficult, and leaves an ugly ſcar, and I have ſeen Gun-powder ſtick in the ſkin after the Cure. That Burning that is in or about noble parts or the Face, or which is very large from falling into the Fire is dangerous and often deadly.

If the ſkin be burnt by a Cautery, we labor to keep it open, by cutting the Bliſter and taking off the Eſchar, and uſe nothing but things mentioned in Flegmon againſt pain and Inflammation, and they may be uſed againſt other Burnings with Blood letting.

As for the place burned that is hurt and pained, firſt we take out the Fire, which is thought to be done by hot things, and therefore the Vulgar hold the part to the Fire, but they are moſt agreeable which have moderate heat and are therefore called Anodynes, and dry without biting, and digeſt without great heat, and which hinder the Bliſters from breaking. this done at the firſt, we muſt uſe ſtronger Driers, and ſuch as heal Excoriation and Ulceration. ſuch as are againſt the ſkin flead off, and mentioned in the Itch. But if it turn to a deep Ulcer by ſuppuration, it muſt be cured as an Ulcer. and if the Weapon or Inſtrument made a Wound alſo you muſt firſt uſe things againſt Burning. and then cure the Ulcer. againſt Burning uſe theſe.

Plants bruiſed or boyled in Water, Wine-vinegar, or Oyl, or Hogs Greaſe are good, as Leeks, Onions, Daffadil, Hemerocallis, Lillies, Danewort roots, Hemp, Alkanet, Thorn roots, or leaves of St. Johns wort, Androſæmus, Pellitory, Althæa, Mallows, Ivy, wild Verbaſcum, Mulberry, Myrtles, Poppies, Hounds-tongue, wild Rue, Seſamus flowers, of Spear-graſs, Ivy, Ciſtus, Typha, or apply Beets roots and all.

Or anoynt with the Juyces eſpecially of leaves and Berries of Ivy, Onyons, Turneps, Nightſhade, wild Lettice which hath a milky juyce according to *Dioſcorides*. with Allum or yolks of Eggs, *Mucilage* or Gum Traganth or Cream.

Or: Take *the juyces mentioned three ounces, Oyl of Roſes, freſh Butter, Hogs greaſe, each an ounce; ſlaked Lime half an ounce, mucilage of Quinces an ounce*: with *Turpentine* make an *Oyntment*. or boyl away the *Juyces* and put *Wax* to it.

The Vulgar apply Elder leaves, but the middle rind is better.

Or: Take *the middle rind of Elder an ounce and an half, the juyce of Elder buds an ounce, Lineſeed Oyl two ounces, Oyl of Roſes and Hogs greaſe, each an ounce; Wax an ounce and an half, Frankincenſe an ounce*,: boyl them in *Water* a little and when it is cold, take of the *Oyl* at the top. *Mathiolus* uſeth *liquid Varniſh*: but we *Lineſeed Oyl*.

Or apply the root of Fennel ſtampt with Cream, but firſt take off the black skin or coat.

Or the middle bark of the Tile tree, which in Roſe water makes a *Mucilage* which is excellent in Burnings.

Or uſe Oyls by Infuſion of the fruits of *Momordica* or Nightſhade, Apples, or of red Poppy leaves. or by Decoction the Oyl in the hollow roots of Daffodil, or Ivy boyled in Oyl and Wine til the Wine be conſumed. alſo Oyl of Elder, Quinces. or by expreſſion, as Oyl of Gourd ſeeds of Nuts or yolks of Eggs.

Or Oyl of Whelps and Worms which is approved againſt Gun-ſhot fire.

Or Hogs Greaſe wel clenſed and dropt into Water, with the application of a hot Iron. others ſtick Straws into Bacon and ſet them on fire to make it drop: but it is better to wrap them in a double paper that is larger and ſet on fire, and ſo let it drop into water, thus they ſeaſon roaſt meat inſtead of Larding it. Bacon alone ſo prepared cureth Burnings, and eaſeth pain with Cream or Yolks of Eggs.

Againſt Gun-powder fire, uſe Butter or Hogs Greaſe dropt into Frog-ſpawn water, or of Gray-fiſh, or Earth-worms boyled.

When there is an Ulcer, uſe pouders, or otherwiſe anointing firſt the part that they may ſtick, with Oyl, Mucilage or Milk. as Aſhes of Gourds, Coleworts, Barley, Shoe ſoals, ſhels of Frogs, or as *Dioſcorides*, pouder of Cinnabar and Cimolian Earth.

The Vulgar wet the part and apply meal to take out the fire.

To abate pain uſe whites of Eggs and Oyl of Roſes with Lint. or with white Wax make an Oyntment, adding mucilage of Quinces and Hogs Greaſe or Barley meal, and in an Ulcer Bole and Frankincenſe.

Or: Take *Leeks or Onions roaſted*, ſtamp them with *yolks of Eggs or Elder Deers or Goats Suet and Turpentine*: make a *Plaſter*.

Or uſe the Oyntment of Quick Lime, ſteep Lime in water til it diſſolve, pour off the water and add freſh, ſeven, ten, or twelve times: keep the Lime in the bottom dry, or uſe it preſently.

This waſht Lime with Oyls of Roſes, or freſh Butter and white Wax makes an Oyntment. or with whites of Eggs, mucilage of Quinces or Fleabane, Ceruſs with Milk and a little Camphire. or Citrine oyntment, Pomatum or Populeum, for the Face.

Or mix this waſht Lime with Hogs Greaſe, with Oyl or Lineſeed and Barley meal for a Liniment.

Oyl of St. Johns wort with waſht Lime is excellent eſpecially in Gun-ſhot.

Or it is good to mix the water of waſht Lime with Oyl of Roſes; and apply it.

Or uſe this Lime water againſt Gun-powder fire. Take *Flints burnt to Lime*, pour *Water* upon them in a *wooden Veſſel*, and there wil be *Fat* ſwimming at the top. uſe this upper *Water* with *Oyl of Roſes* and a *Clout* hot.

Some uſe Sope againſt Burnings.

Dioſcorides ſaith that Glew diſſolved in hot Water hinders Bliſters.

You may make Oyntments of the Aſhes, Pouders, Oyls, Hogs Greaſe, whites of Egs, and Mucilages aforeſaid. adding ſeeds of wild Rue, St. Johns wort, Acacia, fine pouder of Glaſs, Phrygian Stone according to *Dioſcorides*, who applieth alſo Stimmi with freſh Greaſe.

Or Aſhes of Myrtles and yolks of Egs, as alſo Salt peter and Oyl of Roſes, hinder Bliſters from riſing.

Or Ceruſs and oyl of Roſes waſht with Roſe water, the white of an Eg and Camphire. or the white oyntment of *Rhaſis*, or of Ceruſs.

Or Sheeps Dung, Hen or Pigeon Dung, with Oyl of Roſes or Line ſeed. the Vulgar take out Fire with Cow dung.

Dioſcorides ſaith that Salt and Oyl prevent Puſtles. others uſe Niter and Oyl of Egs.

Dioſcorides uſeth Milk and Water.

Or Foment with Coleworts or Cabbage Broath, or with that of Turneps. or uſe the diſtilled Water, lay Colewort leaves on to hinder the Inflammation and diſcuſs.

Or uſe the Decoction of Ivy, Privet, Plantane, Henbane ſeeds to cure Itching.

Or diſtilled Water of Flowers of Verbaſcum, Plantane and Henbane ſeed to hinder Puſtles from riſing with red Sanders and Camphire.

Aqua vitæ is good againſt Bruiſes, and alſo Burnings.

And cold Water hinders Bliſters from riſing.

And

And ſo doth Juyce of Fennel and white Wine.

You muſt not forcibly pul off an Eſchar from a Burning, for the pain and bleeding wil increaſe and the hurt wil be larger: but with Lenifiers and Ripners applied, let it fall off of it ſelf. we can ſcarce get it off in eight daies, and then we take it off with Forceps with little cutting.

Butter ſpread upon a Colewort or Mallow leaf makes the Eſchar fall off.

Or the yolk of an Egg, and Butter or Oyl of Roſes, or Hogs or Hens Greaſe. you may add Althæa roots, or Colewort leaves ſtamped, or other Emollients.

Or: Take *Colewort leaves, and Althæa roots* and other *Emollients* crude or boyled.

Alſo *Triapharmacum Galeni*, and *Tetrapharmacum* are good to make an Eſchar fall off.

The Cure of Wounds in divers parts, made by Cuts, Blows, or Gunſhot.

A Wound is larg, or narrow, or both, or venemous, of theſe kinds we ſhal ſhew divers Cures. We ſhal ſpeak hereafter of a Wound compounded with a Phlegmon, which may happen to an Ulcer: Firſt then of the large Wound, whither by a Cutt, or Prick called a Puncture, or by Gun-ſhot, or the like or by Contuſion, we ſhal ſpeak together.

Among which, that which is broad and dividing the part perforating, and laming, the more ſuperficial and æqual it is, and hath leſs hurt the part, the ſooner it is cured. that which is otherwiſe is more difficult, eſpecially a Contuſion, for in that the fleſh bruiſed, and Blood flowing thither preſently ſuppurateth and ulcerateth. and a wound in the Membrane, and Nerves, about the Joynts, and when the Nerves, or Great Veins, or Arteries are divided, theſe are dangerous by reaſon of Bleeding, Reſolving, or Contraction. They are commonly deadly with pain, through the Scull, and to the Brain, and Membranes, or through the Breaſt or Belly, to the Bowells, yet we have cured Wounds in the Lungs, and Guts, and Bladder, and Womb, leaving it open below, for Dung and Urine to paſs out, and ſome ſay they have cured Wounds in the Brain, and other noble parts.

For the Cure; Let the Diet be ſuch, as may keep the Body clean, the Belly be kept open, and a Vein opened if need require, and the Strength preſerved, and the accidents removed, as Bleeding, in large Wounds, and loſs of Parts, or Inflammation from Gunſhot, or Bruiſe, or great pain. this is don by Blood letting, and other Revulſions, and things mentioned in Wounds with Inflammations, and by binding Plaſters, and Blood ſtanchers. And in reſpect of a wound, if there be any thing within that hurts it, it muſt be removed firſt of all, and then if the lips of the Wound be farr diſtant, they muſt be united, and laſtly you muſt labour to make them grow together, Thus;

If any part or peice of a Sword, or other Inſtrument, or Bullet, which often falls deep or peice of Glaſs or Splinter, it muſt be taken out with Forceps with Teeth, or a Cranes bill, and if you cannot lay hold of it as being a Bullet, open the wound to come at it, ſo you muſt alſo do by broken Bones that are looſe. And if any part be ſo cut away that it cannot be united to grow together, it muſt be cut off. afterwards if the wound be in a hairy part, it muſt be ſhaved off, that it fall not into the wound, and all duſt or Filth muſt be wiped or waſhed away with a clean Sponge dipt in red Wine, which will repell and glutinate, you may for a ſhift uſe hot water.

When parts cannot grow together, we joyn them togethet, nor in ſmal wounds, when the Lips are not farr aſunder, and when the Skin grows to the parts beneath, though it be cut; Therefore in Head wounds there needs no ſtitching. nor in longe Cutts, as when a Stone is taken out of the Bladder: In other parts the remote lipps of the Skin that is divided, alſo the Muſcles and Tendons, and whatſoever is at diſtance, muſt be joyned together, and ſo kept ſome dayes: This is the firſt buſineſs for a Chyrurgeon, in dreſſing of Wounds.

Sometimes by Ligatures alone, ſometimes by Plaſters alſo, we joyn and keep the lips of wounds together by a Rowler made of old ſoft Linnen, not ſo ſtreight as to cauſe Pain and Imflammation, which ſometimtes Gangreens, nor ſo looſe, that the Lips may not exactly meet together, according to the Longitude, and Latitude of the Wound. The Chyrurgeons make a threefold Ligature, the firſt is called retentive, which is made in thoſe parts, where we muſt not bind hard, as in the Neck and Breaſt, or in Wounds that are ſo full of pain, that they cannot abide it. This is done by a ſingle Rowler, which is laid at the end upon the Wound, and ſewed on the otherſide. Another Ligature is called glutinating, or incarnative, with a double rowler beginning at the part againſt the Wound about the middle. where it muſt be be ſtreighter, and ſowing it, rather then tying a knot. The third Ligature, is called expulſive, this belongs to hollow Ulcers, and ſhal be mentioned in them.

The Lipps may be joyned together for a time, with little Buckles or Hooks, but they fall of too eaſily, and therefore cannot be ſufficient for the glutinating of the Wound, which requires ſome time.

When Wounds are long, and their lipps farr divided, they muſt be joyned, for otherwiſe it cannot grow well together, without an ugly Scarr and Deformity, and if then the Tendons can be ſtitched together, the motion wil be leſs hindered. And if the great Veins can be ſtitched, there will be leſs danger of Bleeding, and want of Nouriſhment to the part, this is done in the ſkin as other ſtitches, by drawing a needle through both Lipps of the Wound, and drawing a Thred through, and tying it, in diſtant ſtitches and knots: The Silk muſt be ſlender, but ſtrong and even without knots, and the Needle ſharp, long, and three ſquare, with a ſtitching quil, but when Veins and Arteries are ſtitched, or the Guts, or other internal membranous parts: then you muſt make the Glovers ſtitch, bringing the ſilk often about the lipps of the Wound.

Sometimes we joyn the lipps of wounds with Needles, by paſſing them through and faſtning them about.

You may cure wounds alſo by Conglutination, and the Scarr will be leſs then by ſtitches, this is for the face. and there are two ſorts of Conglutination, the one is by two Plaſters on both ſides of the wound, ſtitching them together when they ſtick faſt, they are made of Glew, Gum Tragacanth, whites of Eggs, and Chalk or Pitch.

The other is by joyning the lipps together, and laying upon it a ſticking Plaiſter, that wil not fall of till they grow together. they are made of Blood-ſtanchers, and Glutinaters, and you may ſtitch the skin withall, at the firſt while it bleeds, Theſe plaſters are made of fine pouders, whites of Egges, and Gum Traganth or arabick, or Izinglaſs diſſolved in Wine, adding the Furr of a Hare cut ſmal, or the downe of a Willow or Reed flowers, or of Grunſel, or dried Muſhrooms, or Spiders webs, apply them with Linnen and a Boulſter.

The Pouder of which this Plaſter is made, is of Bole three parts, Frankinſence or Sarcocol, or Varniſh one part, with half a part of Dragons blood, and Hares, as I ſhewed.

Or of Quicklime, and fine Flower with the reſt.

Or of Lime alone, and the white of an Egge, and Maſtick, to keep it from burning, or of Carpenters Glew, over all the wound, or a plaſter of Pitch.

Other Plaſters that are more proper for Ulcers, ſhal be mentioned there.

Though nature attempts the Conſolidation of Wounds by bringing nouriſhment to the part, and glutinating ſmal Wounds her ſelfe, yet becauſe though there be no Ulcer, there is in many a continual Moiſture, which hinders Glutination, we muſt uſe things to ſuck it up and help Nature by removing her obſtacles (which a Dog doth only by licking) and applying glutinating Medicines. Theſe beſides their drying qualities, muſt aſtringe and make the

lips

lipps of the Wound grow together by sticking, they are for this called Glutinaters though other wayes they cannot do it. And the demonstration that Comfrey boyled in a pot with peices of flesh gleweth them together, cannot prove it to be otherwise.

These also stop bleeding, so that we need no other except the wound be in great vessels. by the use of these glutinaters, flesh and skin also will grow in Wounds, so that nothing will seem to be lost, except they ulcerate, nor need we use any other Medicines to breed flesh, or make a Scarr, as in hollow Ulers. Moreover those Medicines cause a Glutination of the Callus, which Nature makes a nutriment of Bones, when any thing is lost by Wounds or Contusions. These Glutinaters are outwardly and inwardly applied in smal great and deep Ulcers, in these formes.

Some are Plasters such as we mentioned to hold the lips together. or of Pouders following with whites of Eggs and Hares Furr and Downs, at the first.

As: Take *Frankincense, Myrrh, each equal parts, Aloes twice or thrice as much, with Sarcocol.*

Or thus: Take *burnt Bones washt with Rose water, to two ounces add Pomegranate peels and Horse-tail pouder, each two drams; Allum and burnt Vitriol, each a dram*: make a *Pouder.*

Or: Take *Galls, roots of Birthwort, Comfrey, Pine barks, or roots of five-leav'd Grass, each two ounces; Sideritis, Goose-grass, Sumach, Myrtle berries or Grape stones, each two drams; burnt Sponge or wool a dram,* make a *Pouder* for an *Emplaster.* you may add pouder of *stones of Myrobalans, red Kermes, Molockitis stone or Milstone.*

Or: Take *Colophony, Mummy, Dragons blood, each half an ounce; Ceruss, Litharge or Tuty, each two drams; Lead two drams, Blatta byzantine, Moloch stone or Galaxites, each a dram; fine flower an ounce,* with *white of an Eg* make a *Plaster.*

In moist Wounds, use Emplasters of Mastich, Mummy, Aloes, and some of the aforesaid with Turpentine.

Or this usual. Take *Birthwort roots half an ounce. Sanguis Draconis an ounce, Gum Elemy two ounces, Rosin three ounces,* with *Turpentine* make a *Plaster.*

Or: Take *Bitumen, Colophony, Frankincense, each an ounce; red Lead, Sulphur, Cerus, each half an ounce; burnt Allum two drams, Coral a dram, Barley flour an ounce,* with *Gum Traganth* or *Izing-glass* in *water of Horse-tail,* or *Plantane* and a little *Vinegar*: make a *Plaster.*

Also Oyntments: As, Take *Mastich, Sarcocol, Frankincense, Aloes, each two drams; Saffron a dram, Turpentine six ounces, Rosin two ounces, Wax three ounces.*

Or use *Ungentum Aureum* made of Frankincense, Mastich, Colophony, Turpentine, Saffron, Oyl and Wax.

Or: Take *Bole an ounce, Sanguis Draconis, Comfrey roots, each half an ounce; Mastich, Frankincense, Gum Arabick, each two drams; Mummy three drams,* with *Oyl of Roses and Rosin* make a *Plaster.*

Or: Take *Aloes, Sarcocol, Sagapen, Ammoniack, Galbanum, Bdellium, Mastich, Frankincense, Pitch, Bole, Sanguis Draconis equal parts; with Turpentine and Oyl & Blood of a red haird man,* boyl them to an *Oyntment.*

This is a great Drier. Take *Turpentine and Wax, each half a pound; Oyl of Juniper and Bayes, each an ounce; Oyl of yolks of Egs an ounce, Frankincense two ounces, Mastich an ounce, Lead stone and Calaminaris, each half an ounce; Vitriol and Allum, each six drams, Cerus and Litharge, each half an ounce*: with *Rosin* make a *Plaster* or *Oyntment.*

Oppodaldoch. Take *Litharge a pound, Cadmia three ounces, Colophony four ounces, Wax a pound, Oyl a pint and an half,* boyl them, and add *Ammoniack, Galbanum, Bdellium, Sagapen, Opopanax dissolved in Vinegar an ounce and half, Oyl of Bayes and St Johns wort, or Worms, an ounce, Turpentine half a pound*: boyl and stir them. when they are taken off from the Fire, add *Mastich, Frankincense, Myrrh, Mummy and Asphaltum each an ounce*; with *Oyls, Crocus Martis* and *flour of Antimony, each half an ounce*; *Amber and Load stone* to draw out things fixed *an ounce,* make a *Plaster.*

Or: Take *both Comfreys roots and all, five-leav'd Grass, Plantane, Shepherds purse, Mouse-ear, Burnet, Yarrow, Vervain, Dogs-tongue, Betony, in all six handfuls; Earth-worms thirty*: cut and bruise them, add *red Wine a pint, Aqua vitæ an ounce*: boyl them to the consumption of the *Wine,* strain and add *Gum Elemi, Frankincense, Mastich, Sarcocol, each an ounce and an half; Izing-Glass, Sanguis Draconis, each an ounce; Myrrh half an ounce, Turpentine two ounces,* with *Pitch* and *Wax* make a *Plaster.*

Or thus: Take *Birthwort roots, Comfrey, five-leav'd Grass three ounces, Horse-tail, Cypress Nuts, Myrtle berries, Galls, Pomegranate flowers, red Roses, St Johns wort flowers each two ounces, Gum Elemi, Sarcocol, Pine, Galbanum, Ammoniack, Mummy, Opopanax each three ounces, Colophony, Sanguis Draconis, dried Goats blood, each an ounce; Oyl of Roses omphacine, Olive or Myrtles, Grease of a Badger each an ounce,* with *Rosin, Pitch,* and *Wax,* make a *Plaster.*

Oyntment of Tobacco. Take *green Tobacco Leaves eight ounces, Plantane four ounces, fresh Butter six ounces*: Infuse herbs bruised, in *red Wine* all night, in the morning boyl them with *Butter* at a gentle Fire till the *Wine* and *Juyces* be consumed, add *pouder of Gentian half an ounce,* with *Wax* make a Saffron colored *Oyntment.*

Another good in Nervous parts: Take *Comfrey roots two ounces, Birthwort roots an ounce, Sulphur-wort roots half an ounce, Plantane, Bugloss, Vervain, Burnet, Yarrow, Dogs-tongue, Anagallis with the red flower, Agrimony, Horse-tail, each a handful*; cut, and bruise, and boyl them in *Sack* till it be thick, stamp them and heat them again, adding *Wax, Rosin, Pitch a pound,* stir them til they dissolve, boyl them, and when they are off the Fire, add *Mastich an ounce and an half, Galbanum dissolved in vinegar an ounce, Turpentine a pound*: stir them til they be like a *Plaster.*

The Plaster made of Worms. Take *six handful of the herbs mentioned roots and all, Earth-worms half a pound,* boyl them in *Wine* and *Oyl,* strain them, and add *Gum Ammoniacum, Galbanum, Opopanax, each an ounce and an half; Pitch and Asphaltum, each two ounces; Turpentine half an ounce, Stags Nues eight ounces,* boyl them again to an *Emplaster* add *Mastich* and *Frankincense each half an ounce.*

Against the Tendons cut. Take *roots of Daffodil an ounce, roots of Calamus half an ounce, Costus two drams, flowers of Chamamel, Roses, Lavendar, Stechas, St. Johns wort, Sage, each a pugil; Earth-worms, thirty,* boyl them in *Wine* and *Oyl,* adding *Oyl of Indian Nuts,* strain them, and add *Labdanum an ounce, red Storax and Calamita, each an ounce*: with *Wax* make an *Oyntment.*

Pouder of Earthworms and Honey is good in wounded Nerves.

And pouder of burnt Bones, especially of Men, with pouder of burnt Lead is good also to be sprinkled on, or with Honey.

Or Snayls stampt with Frankincense and Myrrh.

These following are good in wounds of the Head.

Emplaster of Bettony, or Cerot of *Nicolas* made of Bettony, Mastich, Frankincense, Mummy, Rosin, Turpentine, Wax.

Or the same composition, except Mummy, with Burnet, Agrimony, Sage, Pennyroyal, Yarrow, Comfrey, Gallitricum, Orris roots, Birthwort, Gum Elemi, Oyl of Fir tree and Vine.

Or an Emplaster of the juyce of Bettony, Wax, Rosin and Turpentine.

Of *de Jamua Mesues* made of Juyce of Bettony, Plantane, Smallage, Rosin, Turpentine, Pitch, Wax.

Or *Gratia Dei*, or Cerot of *Nicolas* called Divine good for all wounds, made of Bettony, Vervain, Burnet, Mastich and Wax.

Or that of *Peter de Argelata*, that besides the last hath Comfrey, Centaury, St. Johns wort, Hedg-hysop, Olibanum, Myrrh, Ammoniacum, Galbanum, Birthwort.

Or *Catagmaticum* of *Andromachus* by *Galen* is good against broken Bone in the Head, or the Emplaster of Squils by *Crito.*

They

They know if the Skull be broken, by laying a Plaster of Frankincense, Labdanum and Wax, after the Head is shaven upon the Contusion, if it be dried in any part, there is the fracture.

These are the usual Plasters for wounds in the Nerves.

Nervinum of *Vigo* made of roots of Madder, Bettony, Rosemary, Horse-tail, Centaury leaves and seeds, of St. Johns wort, Earth-worms, Litharge, red Lead, Mastich, Gum Elemi, Sagapenum, Galbanum, Amoniacum, Pitch, Rosin, Turpentine, Calves Suet, and Goats; Oyl of Chamæmel, Roses, Mastich, Turpentine, Linseed, Vinegar and Wine.

Galen mentions also Ægyptiacum of *Andromachus* and that of *Philogenus*.

And the green Plaster of *Dinus*, and that of Machæron. And *Avicens* Plaster of Flax, and that of *Minium* by *Vigo* and *Massa*.

If the Bones be hurt any waies, Oxycroceum is good, as that of *Nicolas* made of Ammoniacum, Galbanum, Myrrh, Frankincense, Mastich, Colophony, Rosin, Pitch, Wax, Vinegar Saffron.

Or the Oxycroceum of *Leyden* that hath besides the former, Litharge, Bole, Allum, Storax, red and liquid.

Vigoes Oxycroceum is made of Litharge, Minium, Bole, sealed Earth, Myrrh, Frankincense, Mastich, Rosin, Suet, astringent Oyls and Juyces, Ash, Myrtle, Comfrey.

Or the Sparadrap of the Chirurgeons for hurt Bones, which is Linnen dipt in Oyl and Wax, Ceruss and Labdanum, Litharge and Myrrh, Allum and Camphire, or Sanguis Draconis, Mummy, Minium, Mastich.

Or Natural Balsom, or that which is like it, which is of excellent virtue to heal wounds.

Or Artificial Oyls with Lint or Tents to keep the wounds open called *Balsoms* by the Chirurgeons.

Oyl of Nut, being greasie wil rather hurt than heal used alone: except it be old, and mixed with Wine and Salt Also Oyl of yolks of Egs is good, or Oyl of Myrrh and Rosins which are good alone.

In great wounds, use Oyls with these drying Glutinaters, as Oyl of St. Johns wort, Adders tongue, Moulin, Sanicle, Lemmons, Pauls Bettony, Pyrola, wild Sage, Fruit of Monordia, Olive, Lineseed, Roses omphacine, Myrtles, Mastich boyled and mixed with Turpentine and Wax.

Or make this Balsom of Pouders of Herbs. Take *Comfrey roots, bark of the root of Elm, each three ounces; tops of St. Johns wort and Centaury the left with the flowers, each two handfuls; Self-heal, Bettony, Yarrow, each a handful; red Roses a pugil, Earth-worms ten, Sack four ounces, Turpentine two ounces:* let them Infuse hot, or boyl and strain out the *Oyl*, or still out a *Liquor*.

Or add *Horse-tail, Celandine, leaves of Arbutum and Elm flowers, of Chamæmel and Verbascum*, and in Head-wounds *Sage, Rosemary a handful, Nutmeg half an ounce:* with more *Wine* and *Turpentine* and *Oyl*: boyl or distill them.

Or: Take *flowers of St. Johns wort in Oyl and Wine*: put them in the *Sun*, then in a *Horse Dunghill* fourteen daies, add *Turpentine, Myrrh, Mastich*: let them boyl, strain out the *Oyl*: this is *Balsom of St. Johns wort* so excellent in Wounds.

Or take the Ingredients of the first or second Balsom, and mix them with the following, and make an *Oyl* by boyling or distilling.

Or thus: Take *Frankincense, Myrrh, Galbanum or Bdellium, Gum Elemi or Ivy, Myrrh, Aloes pondered, each half an ounce; Oyl a pint, Turpentine two ounces, Aqua vitæ an ounce and an half*, boyl them gently, and strain off the *Oyl*, if at the conclusion of boyling, you do add half an ounce of *Verdigreese*, it wil be green and beter.

Or: Take *the pouders above mentioned*, and with as much *Rosin of Turpentine*, distil a *Water* first, then an *Oyl*.

Or: Take *the pouders aforesaid three ounces*, add *Mummy, Gum Arabick, Sagapenum, Sarcocol, Sanguis Draconis, Opopanax, each half an ounce; Labdanum, Benjamin, Storax Calamita, each two drams; Amber six drams, Spike three drams, Storax liquid two drams, Turpentine as much as all*: distil them. This *Balsom* will be better with *Verdigreese*.

Some add Spices, that Balsomes may be good in cold Diseases, and pleasant, as Nutmeg, Cloves, Cinnamon, Galangal, Cubebs, Wood Aloes, Zedoary, which do little for wounds: also Musk, and Ambergreese, others add Gastor and Euphorbium, for cold Causes.

So make a Balsom of Rhubarb, oyl of Roses, or Worms with Frankincense, Mastick, Opoponax, Camphire by boyling and straining. Or Take: *old Oyl a pint, Wine half a pint, juice of Daffadil, and Sideritis, each three ounces; Turpentine two ounces, Gum Elemi, Frankincense, Mastick, each an ounce and half; Sanguis Draconis, Aloes, each an ounce; Roots of Comfrey, and Birthwort, each six drams; flowers of St Johnswort, halfe an ounce*, boyl them gently, and strain out the oyl.

Or, Take *Common Oyl, or of Linseed, eight ounces, Oyl of Bayes two ounces, Oyl of Turpentine an ounce, Oyl of Juniper berries distilled, or of Spike, or Petroleum, half an ounce, Turpentine, two ounces, Colophony, Mastick, each an ounce; Aloes, three drams, burnt Brasse two drams, white Calacanthum, a a dram*: Set them hot in a brass Vessel stirring them till they are green, strain it, or boyl it and add *Verdigreece three drams*, add *Oyl of Cloves*.

Another Balsome that cures presently, Take *Liquid Storax, Myrrh, Sanguis Draconis, Carpobalsome, Gum Arabick, Sarcocol, Bdellium, Opopanax, Aloes Hepatick, each a dram; Oyl of Mastick two drams, Venice, Turpentine, as much as all, digest them eight dayes in a hot place*, then distill them.

The Chymists Balsamum: Take *flowers of Sulphur thrice calcinated, two ounces, Camphire, a dram and half*, pouder them, add *Oyl of Turpentine, four ounces*, distill an Oyl.

Liquid Varnish is added such as Joyners use; A Balsome, Take, *Oyl of Linseed a pint, Gum of Varnish, Mastich, each an ounce and half; Frankincense half an ounce, Litharge an ounce, Chrystal pouderd or burnt Bones, half an ounce, white Calcanthum, three drams*, boyl them gently, add *Turpentine, oyl of Spike or Petroleum, each half an ounce*; and strain it adding *Verdigrease two drams*, this is our Balsome and it is excellent.

Turpentine with Yolks of Egges, and Honey, cures smal Wounds.

Or use Juyces of Herbs, with Honey, Yolks of Egges, and Turpentine, with drying Pouders mentioned.

Or, Take *Juice of Roses, Plantane, each two ounces; Vinegar an ounce, Oyl of Roses Omphacin, three ounces, Oyl of Yolks of Eggs and Turpentine, each an ounce*; boyl them to the Consumption of the Juyces, add *Litharge, Ceruse, Tutty, each two drams, Allum, a dram, Omphacium, three drams, and a little Wax*.

Or use Juice of Tobacco, with oyl, and Turpentine, Pitch, and wax boyled, this is in great request.

Juice of Nettles and Urine cures wounds wonderfully.

For Head wounds, Take, *Juice of Bettony six ounces, Oyl of Roses, Turpentine, Wax, each two ounces, Womans Milk, or Butter, Wine, or Vinegar, each an ounce and half*; boyl them to an oyntment, or with Rosin make a Plaster.

Another for the Head, Take *Topps of smal Centaury, Leaves of woodbine, dryed Bettony pondered, each two ounces and an half*; Steep them in *Wine*, boyl them, and add *Honey two ounces, Milk an ounce, Turpentine and Wax, each six ounces*, boyl them till the juices are gone, add *Frankincense, Mastick, Gum Arabick or Elemi, each an ounce*, and *with Turpentine*, make a Plaster.

If the Skull be broken, Take *Juyce of Vervain, Bettony, Burnet, Periwinkle, Celandine, Smallage, each an ounce; Turpentine, four ounces, Wax two ounces*, boyl them til the Juyces be consumed; add *Comfrey roots, and round Birthwort*,

wort, each half an ounce, Orris roots, two drams, Sarcocol, Myrrh, Mumy, Amber, each a dram and half, make a Plaſter,

Or Take, *Honey of Roſes two parts, Oyl of Roſes or of Eggs, one part, Turpentine half a part,* mix and dip a *Scarlet Silk* therein, and put it into the Fracture, the Chymiſts uſe Oyl of *Turpentine,* and Oyl of *Myrrh.*

Some uſe the inward bark of the Tile Tree, to roul the Wound, or Paper wet in Wine.

Or Sponge.

Or Spiders Webs to glew ſinal Wounds, and ſtanch Bood.

Or Puſſoyſt which drieth, and glutinateth.

Or boyl, or ſteep a Rowler in Allum water.

Or Bruiſe Herbs with Meal.

Or thus, Take, *Comfrey roots and Alkanet, Celandine, Centaury, Acrons,* beat them with Oyl of *Roſes, and Greaſe.*

Fomentatations are made or Injections of Comfrey, Bugle, Selfeheal, or Saracens conſound, Rock Comfrey, Sideritis, St Johns-wort, Pyrola, Adders-tongue, Crow-foot, Yarrow, Achillea, Mouſear, Dogs tongue, Burnet, Agrimony, Horſtaile, Vervain, Strawberry leaves, Pauls Bettony, Hedg-Hyſſop, Scordium, Woad, five leaved Graſs, Centaury the leſs, Eupatorium, Lyſimachia, Groundpine, great Celandine, Tobacco, alſo of Birthwort, Tormentile, Snake-weed, Smyrnus, Lycopſis, Centaury the great, Poterium, Daffadil roots, bark of Elme, Tile Tree, Pine; Leaves of Cypreſs, Myrtles, Oaks, Elm, Medlars, Cornil, pear tree, Sumach, Ciſtus, Helianthemum, Verbaſcum, Shepherds purſe, Plantane, Lonchitis, Moonwort, Vitex, Polyenemus, wild Coleworts, Anagallis, Solomans ſeals, Polygonum, Gooſgraſs, Clymenus, Argemone, great white Bottles, Herb Trinity, Balſam, Conyza, Erigerus, Goats beard, Bettony, Sage, Polymontane, Roſemary, and Roſes, Flowers of Labruſca, Myrtle ſeeds, Juniper Berries, Acrons, Dates. Boyl them in Water or Wine, adding Vinegar, and drying Pouders and Allum.

Or waſh Wounds with the diſtilled water of them.

Or diſtill this, Take, *Juice of Plantane, Agrimony, St Johns-wort, twelve ounces, white Wine, three ounces, Allum, three ounces, Maſtich, Frankincenſe, each half an ounce, Orpiment a dram, whites of two Egges,* Deſtill a water.

Or you may ſtill a water with a ſtrong Fire out of pouder of Bricks, and Wax waſhed often in Wine.

Some uſe the water that is in the Leaves of Elme.

You may make fine Pouders with Allum, to ſprinkle upon Wounds of the Ingredients, for the Plaſter.

Or for the Head, eſpecially if the Skul be broken, of Orris, Birthwort, Flower of Orobus, and Frankincenſe, Myrrh, and Sarcocol, or Aloes and Sanguis Draconis, or of bark of Pitch tree, and of All-heal roots, and Capers, and Cypreſs roots, and when there are ſcales of Bones, in the wound, uſe ſcales of Braſs, Pumice ſtone, and Crocus Martis in pouder, and for the Head, grains of Kermes, Saunders, Cypreſs nuts and Myrtles, and when you will dry more, Tutty and Antimony.

If the Brain appear, Sprinkle Aloes alone.

Mans Blood, or Goats dryed, is a good Pouder to glutinate wounds.

Or the red Liquor of the Blood-ſtone, rubbed upon a whet-ſtone, or the white Liquor of the Galactitis dryed.

There are alſo Potions to cure wounds, called Vulnerary, good not only when they peirce to the Stomach, and parts whither they can reach, but for wounds in the Breaſt, and other parts; and ſome ſay theſe Potions are of that force that they wil ſweat out at the wound, and they wil be under the Skin, til it is opened to let them out, if they be given to men not wounded. this miſtake came from ſome Humor, that they ſaw like the Potion about the Wound, but experience teacheth us, that they are of great force to heal wounds, but how we doubt. but it is probable they do it by a drying quality, which though it comes more eaſily to inward wounds, may come alſo to outward.

Theſe Decoctions are made of experienced Plants, boyled in white Wine, and taken Morning and Evening, or as much of the Pouder as you can take up with three fingers, in white Wine boyled to the third or fourth part, or in Ale, Honey is uſually added, and they may be made nt oSyrup.

The Decoction of *Pyrola* alone is the beſt, or with Sanicle, or Saracens conſound, or Ladies-mantle.

Or of wild Angelica in Wine uſed inwardly and outwardly, which is good againſt Ulcers.

Or: Take *Saracens conſound, Sanicle, Mugwort and Burnet:* boyl them.

Or Saracens conſound Beets, wild Angelica ſtalks Sanicle, Ladies-mantle, *Pyrola.*

Or: Take *Comfrey, Tormentil and* Madder roots, *Pyrola, Ladies-mantle,* Strawberry leaves, *Agrimony, Yarrow, Horſtail, Dogs-tongue, Avens,* Bettony, *Periwinkle, Burnet, Mouſ-ear, Golden-rod:* boyl them.

Or add to them Conſolida the leſs, Adders-tongue, Knot-graſs, Solomons-ſeal, Herb-trinity, Birthwort, Snakeweed, white Dittany, roots of Coſtus, Sun flower, Valerian, Sowbread, Balſamina, Lungwort, wild Tanſie, Solſequium, Bears-ear, Moonwort, Sion Crateræ or wild Parſley, Moutain-ſage, Nep, Hyſop, Pennyroyal, the leſſer Centaury and Gentian, ſome boyl Cray-fiſh therewith.

Or: Take *Pyrola, Saracens conſound, Beets, wild Angelica, Cardous, Agrimony, Bettony, ſprigs of Savin:* take a ſpoonful of theſe in *Pouder,* boyl it in *Wine,* drink two ounces thrice a day faſting. this wil drive away any thing out of a Wound, and cures Ulcers.

This is approved by the *Italians.* Take *Comfrey, Plantane roots, Dove foot, Dogs-tongue, each a handful; Burnet, Mouſ-ear, Avens, red Coleworts, Agrimony, each half a handful:* boyl them in *red Wine,* add *Honey,* ſtrain and drink thereof every morning.

Or thus: Take *red Coleworts,* Madder, *Herb Robert, Plantane, Hemp, Southernwood, Tanſie, Rocket ſeed, Smallage, Parſley and Fennel ſeed:* bruiſe and cut them: boyl them in *Wine,* add *Honey*; give it morning and evening.

Another: Take *the ſtalks of red Mugwort, leaves of white Daiſies, Sanicle, Pyrola, Ladies-mantle, Bettony, Sage, Lavender,* Mummy *half an ounce*: boyl them, ſome add *Caſtor* with great ſucceſs.

A rare ſecret experienced in Gun-ſhot. Take *Bayberries, roots of round Birthwort, each a dram; Cray-fiſh dried in an Oven a dram and an half, Self-heal dried half an ounce*: make a *Pouder,* boyl it in three pints of *white Wine,* to the conſumption of one pint, drink an ounce thrice a day, and waſh or inject into the Wound.

Another againſt Gun-ſhot when the bones are broken: Take *Comfrey roots an ounce and an half, Birthwort an ounce, Sowbread and Serpentaria roots, each half an ounce; Selfheal and Herb Robert, each a handful; Savin half a handful, Mummy two drams, Crabs Eyes half an ounce, Galangal two drams:* boyl them in *white Wine.*

In Head-wounds uſe the the Decoction of Bettony, Lilly of the Valleys, *Pauls* Bettony, Celandine, Perſicaria, Periwinkle, Centaury the leſs, Nutmeg, Mace and Galangal.

For wounds in the Breaſt, boyl five-leav'd Graſs, Avens, Comfrey, Madder, *Pauls* Bettony, Burnet, Mugwort, Pellitory of the wall, Hemp, Creſſio, red Coleworts, Chamæmel flowers, Violets, purple Aramanthus or Marjoram, Raiſons.

In wounds of the Stomach, give things to ſtop blood and heal, as Bole, Comfrey, Galangal in red Wine.

In Wounds of the Inteſtines, give Horſ-tail roots and all, and Ground Ivy, boyl them in Water according to *Dioſcorides.*

Mathiolus gives Heifers dung, and the hair under the belly of an Hare boyled with Honey the quantity of a Bean, often.

You

You may give the Juyces of Herbs mentioned, or ſteep them in Wine or Water, as Comfrey roots and the like, adding Honey.

Or ſtamp red Coleworts and Hemp in Wine and drink the ſtraining.

Stilled Waters are not ſo ſtrong but they do ſomething eſpecially a draught of Water of St. Johns wort, or Saracens confound, morning and evening.

Or ſix ounces of the water of Horſ-tail or Sowbread with Sugar for wounds in the Inteſtines according to *Mathiolus*.

You may put pouders into the Decoctions mentioned, as of *Hedg-hyſop a dram, Crabs Eyes half an ounce, Spermaceti ſix drams, Nux Vomica a dram and an half*, with *Zedoary Mace and Galangal*.

In Breaſt wounds give pouder of Egſhels, and Crabs Eyes with Poppy water.

When the Entrals are wounded, give a ſpoonful of pouder of Momordica.

You may give alſo every morning half a dram of theſe Plants conſerved with Honey.

Or Oyl of Juniper in Drink to cure inward wounds.

Or Oyl of Crocus Martis and Eſſence of Coral, each a ſcruple; with water of Frog-ſpawn is given by *Quercetan* to ſtanch inward bleeding.

This red Oynrment is excellent to be drunk in internal wounds. Take *Sanicle, Pyrola, Agrimony, Horehound, each two handfuls; Tormentil roots two ounces, Comfrey roots, Caſtor, each an ounce; Alkanet roots half a pound, freſh Butter ſix pound, red Wine twenty two ounces*: boyl them according to Art, and add *Sperma cæti two ounces*: make an *Oynment*.

Here we may ſpeak of Drinks againſt Bruiſes, by Stroaks or Falls, which are to diſſolve congealed blood, and to begin at the firſt, when there is a wound, or only a tumor from the Contuſion, or a pain without any appearance, as we ſhewed in Tumors and Contuſions. They are made of the following ingredients.

Aſhes of Tile tree with Mummy, or mummy alone.

Or: Take *Mummy two drams, Rheubarb a dram and an half, or Monks Rheubarb or Centaury rinds, of citrine Morobalans, Madder roots an ounce*: make a *Pouder*, give two drams with the *Broth* of a *black Chicken* boyled with the Feathers on after, it is gutted.

When we ſuſpect clotted Blood to be about the meſaraicks, Stomach or Guts, then we give a dram of the Pouor four ſcruples with Caſſia, Diaprunis ſolutive an ounce, ſome add Agarick.

In fear of a Fracture and Bleeding to five drams of this we put a dram of Bole, Sanguis Draconis or ſealed Earth, with half a dram of Sperma cæti. or pouder of Snakeweed, Tormentil, flowers of St. Johns wort, great Cyanus or White-bottle, Crabs Eyes a dram, with a Decoction of Wine, and Nutmeg, Fennel ſeed and Sugar.

Decoctions alſo of Comfrey roots, Birthwort, Madder, Vincetox, Snakeweed, Tormentil, Baccharus or Ladies-Glove.

Or Yarrow, Self-heal, Sanicle, Bears-ear, *Cyanus major* or White-bottles, Mouſear, Shepheards-rod, wild Tanſie, Ladies-mantle, Ophris, Moonwort, Plantane.

The pouder of *Vinca pervinca* or Periwincle and Mugwort are approved with Angelica and Coleworts if a Rib be broken.

Some boyl wound herbs in freſh Butter and a little Wine, and give a dram of it ſtrained, in hot Broath or Ale, and anoynt the part pained with the ſame.

And Waters of Plantane, Sowbread, Comfrey and Bettony.

Diſcorides gives a dram of the Juyce of Gentian.

The Cure of ſmall Punctures in divers parts, and in the Nerves.

A ſmall wound with a little orifice is a puncture, and muſt be cured as a Wound, if it be only in the skin and fleſh it is leſs difficult, but if it be in the Nerrs or Membranes, for any nervous part very ſenſible, it is worſe, becauſe it eaſily cauſeth Convulſion, and hurt of motion. If a Nerve be pricked it is ſeldom becauſe it is little and round and gives way, except the Puncture be in the back parts, where the Nerrs are larger, as in the Arms, and Leggs, therefore Chyrurgeons ſay that wounds behind are harder to be cured then before: But if a Puncture be in the great Muſcles, or the Heads thereof, Punctures may be oftner then in the Nerrs alone, but theſe are called Punctures of Nerrs alſo. When Punctures reach into the Belly or Breaſt, they are dangerous or deadly, if they hurt the Entrails as we ſhewed in large wounds, and not only ſo, but by reaſon of the blood falling into the Cavites of the body, and congeals and putrifies and therefore the Chyrurgeons ſay it is an evill Signe to bleed inwardly.

For Cure you muſt uſe Evacuations, and Revulſions, by bleeding, if need be as in large wounds, and keep the body clean by a good Diet.

The Method of curing a Puncture, is if any thing ſtick there to take it carefully away preſently, or by degrees, or to draw it out by applications, and if they be deep in, they will not come forth til there is Suppuration, and then they will come forth with the matter. Then you muſt not cloſe the Orifice, as in large wounds, but rather enlarge it, and keep it open, leaſt the blood that flows thither being in a ſtreight place, ſhould cauſe Inflammation, or the moyſture or Excrements reteined, ſhonld hinder the Cure, and cauſe Accidents, and that whatſoever remains, may come forth more eaſily: Thirdly you muſt conſolidate with driers that conſume the moiſt humors, and ſo help nature, which wil as I ſhewed cure all wounds alone, if Impediments be removed; theſe are called Glutinaters, neither need you uſe ſuch ſtrait Ligatures as in large wounds, let the Medicines be Emplaſtick and Unctious, to keep open the Orifice, til it be cured; For if they be bad dry and binding, they would too ſoon cloſe the Orifice, and hinder the cure: And with theſe Remedies, we may mix things that draw things out, they are as followeth,

We pul out things by Mannual operation, and Inſtruments, as Thorns and Darts, and the broken peices that ſtick in the body, by pricking the skin and forcing them out with ſome of the fleſh, and then ſuck the wound: by this means the Vulgar cure all ſmall ordinary Punctures.

And if the things ſtick faſt and deep, and cauſe great pain and fear of Inflamation, and other miſcheif, we cut the Orifice larger.

If the wound will endure it without pain, keep the Orifice open with a ſmall Tent armed with Medicines.

Punctures are commonly cured with Plaſters alone, which Mollifie the ſwollen Lipps, and Orifice, and dry it by degrees, and keep it open til it fall away of it ſelfe, after the wound is healed: Theſe plaſters muſt not dry ſo much as in great and foul wounds, but keep their ſtrength and not be ſo often changed, but one may ſerve many dayes, and I have known that ſame plaſter to cure a ſecond wound, and if the Puncture paſs through the member, a Plaſter muſt be before and behind.

There are Emplaſters a purpoſe for Punctures which dry and draw out things that ſtick in them, the Germans call them ſtitch plaſters. we ſhall tell yon the beſt and eaſieſt way to be made, Take, *Frankincenſe, Maſtick, Myrrh, Colophony, Mummy, each an ounce, Camphire two drams, Saffron a dram, Thymalus greaſe an ounce, Wax four ounces, Pitch an ounce*, melt the three laſt, and add the reſt, and make a Plaſter.

Or, Take *Litharge a pound, Cadmia four ounces, Oyl Olive, a pint, Oyl of Bayes four ounces*, boyl them to a thickneſs add *Gum Galbanum, Ammoniak and Bdellium, each two ounces* boyled in Vinegar til it be conſumed, *Wax and Turpentine, each half a pound*; *fat of the fiſh Thymalus an ounce*: ſtir them hot, and add by degrees *Frankincenſe, Maſtich, Myrrh, each an ounce*; make a *Plaſter*.

Or: Take *Wax, Pitch, Roſin, Turpentine, Oyl, each four ounces; Oyl of Bayes or worms or Eggs, fat of Thymalus, each*

an ounce and an half; melt them, and while they are hot, add *Galbanum* and *Opopanax* diſſolved in *Aqua vitæ*, *powder of Colophony*, *Bitumen*, *Mummy*, *Maſtick*, *Frankincenſe*, *Myrrh*, *each an ounce*; *Litharge*, *Ceruſs*, *each ſix drams*; *Lapis Calaminaris*, *Load ſtone*, *Blood-ſtone*, *Coral or mother of pearl*, *Bole or ſealed Earth*, *Chalcanthum*, *Camphire*, *each half an ounce*; *roots of Birthwort*, *Comfrey and powder of Earthworms*, *each two drams*; *Saffron a dram*, moiſten them with *fat of Thymalus*: make a *Plaſter*.

Another to draw out ſplinters that are fixed: Take *Litharge Sulphur each an ounce*; *Minium and ſcales of Braſs*, *each ſix drams*; *Allum*, *Chalcitis*, *half an ounce*, *Load-ſtone*, *red Coral*, *each two drams*; *ſealed Earth a dram and an half*, *roots of Birthwort*, *Dragons*, *Sowbread*, *Juniper berries and Nettle ſeed*, *each a dram*; *Galbanum diſſolved in Vinegar an ounce*, *Amber ſix drams*, *Frankincenſe*, *maſtich*, *myrrh*, *mummy*, *Opopanax*, *each half an ounce*; *Propolis an ounce and an half*: with *Turpentine*, *Pitch*, *and old wax* make a *Plaſter*, if you add *Oyl of Turpentine*, *Myrrh*, *Sulphur*, *Amber*, it wil be better.

The Plaſter of *Andromachus* draws out things, as *Avicen* with other things hath the head of a Lizard, milk of the Mulberry tree, and Berries found in the Palm-tree.

Half an ounce of Verdigreeſe makes theſe Plaſters ſtronger, or two drams of Oyl of Juniper, Spike, or Cloves.

The black Plaſter for the ſame is made of Olibanum, Myrrh, Mummy, Sanguis Draconis, Corals, Load-ſtone, Ceruſs, Roman and white Vitriol, Earth-worms, Camphire, Oyl of Roſes and of Eggs, of Spike, Juniper, greaſe of a Hen or Thymalus, Colophony, Turpentine, Pitch, Wax.

Againſt Punctures in the Nerves and Nervous parts at firſt: Take *Bean flower or of Lentils*, *powder of Althæa roots each three ounces*; *Daffodils*, *two or three roots*, *Lilly one root*, boyl them in *Wine* and ſtamp them with *Turpentine* diſſolved with the *Yolk of an Eg half an ounce*, *Honey two drams*, *Saffron half a dram*, *Oyl of St. Johns wort* and *wax*, make a *Plaſter*.

Or: Take *St. Johns wort and Centaury the leſs*, *each two handfuls*; *Betony*, *Roſemary*, *Self-heal*, *Plantane*, *mouſ-ear*, *each a handful*; *Chamæmel and Dil flowers*, *each a pugil*; *Daffodil*, *Comfrey and madder roots*, *each an ounce*: ſlice them, *Earthworms waſht in Wine twenty*, *Oyl of Sack*, *each a pint and an half*: boyl them, ſtrain off the *Oyl*, add three ounces of *Deers*, *Goats*, *or Sheeps Suet*, *Turpentine three ounces*, *maſtich two ounces*, *Gum Ammoniack*, *Galbanum*, *Sagapenum diſſolved in Aqua vitæ*, *each an ounce*; *Litharge an ounce and an half*, with *wax* make an *Oyntment*; or with *Pitch* an *Emplaſter*.

Or uſe *Guido's* Plaſter of Worms or Diarrhæa.

Or Oyls and Punctures of the Nerves.

If the pain be great, pour in hot fallet Oyl, or of Chamæmel, Dil, Rue.

Or drop or lay on with a pledget Oyl of St. Jhons wort, Turpentine, Worms, Maſtich or Savin, or if the pain be great, Oyl of yolks of Eggs, or the fruit of Momordica.

Or Oyl of Lovage with Greaſe of a Lyon and Wax makes a rare Oyntment.

Or Oyl with Turpentine, Roſin, Opopanax, Sagapenum, Euphorbium or Sulphur vivum diſſolved in it.

Or other Balſoms mentioned in Wounds.

Or apply Turpentine with the yolk of an Egg and Saffron.

Or Leaves of Groundſil, with Frankincenſe, according to *Dioſcorides* and leaves of the leſſer Dracunculus with Coutchineel.

When the puncture is by a Thorn or Needle, make a Pultis of Hemp leaves with the white of an Egg and Vinegar.

To draw things faſtned in a puncture, uſe the Plaſter of Garlick by *Aetius* made of Garlick, Niter, Pitch, marrow of a Deer, Wax and Oyl.

Or Leaven and Propolis with Honey and wax.

Or Snails taken out of their ſhels, and Earth-worms bruiſed or boyled in wine, and mixed with meal.

Ordinary Flies bruiſed and applied draw out ſplinters.

When a Thorn is drawn out, waſh with the Decoction of red Peaſe, or with old white Wine when the vein is pricked.

Or apply powder of Crabs Eyes, Harts-horn and Earth-worms, with Honey and Turpentine.

Or give the Wound-drink mentioned, for they work ſo ſtrongly that they wil not only expel from inward but outward parts.

If a puncture ſuppurate, cure it as an Ulcer.

If there be Inflammation, cure it as a wound with inflammation. If a Convulſion or Palſie, or Contraction follow, cure it as is ſhewed in them.

The Cure of venemous and poiſoned wounds Strokes and Biters.

Wounds or Punctures poyſoned from a Sword, weapon, Dart, or Bullet poyſoned with evil juices, or otherwiſe: or from biting of Serpents, weaſels, mad Dogs, of which in *Hydrophobia* or fear of water, or from Scorpions, Spiders, are according to the Venome better or worſe: As when it is from a Scorpion, it is moſt dangerous, or when the wound is great which cauſe great Accidents, and leave ſtubborn Ulcers, ſome have only Heat, and a little Pain, and are not ſo bad except that cauſe inflammation, and ſo a ſtubborn Ulcer, ſuch come from our Snakes and Spiders, which are not ſo dangerous as theſe from Vipers and Phalangies; And the ſtinging of Bees is ſuch, in all which, though the Hurt be ſmall, the pain is great.

If the Venome be great you muſt labour to draw it out, and then cure the wound; Thus.

Give Antidotes ſuddainly, to reſiſt poyſon, and proper as Treacle, Mithridate, Antidote of *Eſchras*: Alſo that of Skinkey, Bloods, Earth of Lemnos, mentioned by *Galen*. The Electuary of Aſa by *Meſue*, and others mentioned by *Dioſcorides* and *Nicander*.

Or that of *Mathiolus*, and that ſo much comended made of Laurel called the Saxon Antidote, and others mentioned in the Plague and in Madneſs. And in a poiſoned wound, if you uſe Bole, earth of Lemnos, and Mummy, they both reſiſt Poyſon, and heal.

Or this Decoction that heals and reſiſts poyſon, made of Roots of ſwallow wort, Valerian, Tormentil, wild Angelica freepr in Vinegar, and Leavs of Scabious, Nettles, ſmall Valerian, Flowers of Conval Lillies, and Pervincle; boyled in wine.

Or Juice of Dittany, Scorzonera, and Gentian.

Some ſay that Cocks or Hens dung boyled, expels poyſon.

That rare Oyl of Scorpions of *Mathiolus* to anoynt the pulſes and Arteries, reſiſts all poyſons as he ſaith.

Divers things are applied outward to draw forth poyſon, as we ſhewed in peſtilent Carbuncles, and when we ſpake of the biting of mad Dogs, and againſt ſtinging of Scorpions and Spiders, Burning, Cutting, and Cupping are good.

And things applied that reſiſt Venom.

As this plaſter. Take *Pigeon or Hens dung an ounce*, *powder of Dittany two drams*, *Niter a dram*, *with Hares greaſe*, *Oyl of bitter Almonds*, *and VVax* make a *Plaſter*.

Or this: Take *juyce of Scabious*, *Rue*, *Onyons roaſted*, *each two ounces*; *juyce of Anagallis with the purple Flower*, *Sowbread*, *each two drams*; *great Spurge ſeeds a dram*, *Galbanum diſſolved in Vinegar ſix drams*, *Oyl of Amber*, *Sulphur*, *each half an ounce*; *Oyl of Saffron a ſcruple*: with *Treacle*, *Mithridate and Turpentine* make a *Plaſter*.

Galen mentions divers plaſters for venemous wounds and punctures called *Icoſij*, their Ingredients are to cure wounds.

But this plaſter called *Diadictamnum* is more proper to draw out ſplints and poyſon, and ſo is *Unguentum Matedonium*.

You

You may find in *Dioscorides* and *Nicander* specifical medicines against particular Venoms, as a bruised Scorpion or the Oyl thereof against the sting of a Scorpion. of biting of mad Dogs we have spoken.

In other Bites or stingings which cause burning rather than Venom with tumor and dolour, you must use things accordingly. for stinging of Bees, use Potters Earth and herbs that abate tumor mentioned in *phlegmon*, and things mentioned in Burnings are good against stinging.

For Biting of Fleas and Gnats they cause but a little itching, and a spot and small tumor, therefore we shall omit them.

The Cure of wounds unequally divided.

In wounds with Saws or rugged weapons the torn flesh must be cut away presently or taken away with an actuall or potential Cautery, and the wounds made even and cured as others.

The Cure of plain, hollow, filthy, lousie, eating, spreading and malignant Ulcers.

If an Ulcer come frm a wound or an Imposthume which we call sordid, whether it be plain, hollow or sinewous, and not covered over, or putrid, lousie, or that sweats out water, or follows a *paronychia* or Felon; or comes of foul Juyce and nourished therewith which is eating, or spreading, or malignant, as in the French pox and Elephantiasis, they must be cured alike because in many things they agree. afterward we shal shew the cure of Ulcers that have a *Callus* or covering, or flesh, or preternatural tumor.

We shewed the cure of Ulcers with Cancer, Carbuncle, Ring-worm and Scabs in the Cure of Tumors and pustles.

Those Ulcers which come from wounds or Imposthumes the less hollow they are the sooner they are cured. Foul & lousie Ulcers are hardest especially in Nervous parts that gleet water, because they make the joynts unmovable or Gangræne, or the Fellon-ulcer that eats off the Joynts of the Fingers when they are nourished with evil Juyce, they are worst; as Eating, corroding or spreading Ulcers, these last long, and are sometimes incurable, especially if they be in a part depending, as in the Foot so that the humor descends continually to them, and when they are nourished with a vein adjoyning, they either must not be cured, lest the humor being stopt cause worse accidents, or cannot. Aud such as take off the skin, as rotten bark of a tree, are dangerous by reason of the Bones or Gristles which they foul, as in the Nose and Ears which destroy the parts. Also malignant Ulcers in Womens privities or Mens yards are long a curing, and sometimes consume the part. They which from the French pox are not cured til the Pox is cured. Ulcers in Elephantiasis continue, increase, and are desperate, as the Disease is.

For Cure of all these you must thus proceed, first with general helps, as Evacuations when the body is full or foul, by bleeding or purging. then you must look at the Cause, whether it be a salt, cholerick, or waterish humor, and give things particular for that. as particular Purges often in stubborn Ulcers, as in the Scab and other Diseases from evil juyce. Sweating is good to through out the humors, and cures the French pox and the Ulcers also. And a spare Diet as shal be shewed in the Pox. If a Vein dilated called Varix do nourish an Ulcer it must be opened to bleed. or the Vein cut off which is more necessary, as we shal shew. In all sorts of Ulcers keep a good Diet and the body, clean that it may cure the better.

Topicks are to be used to remove impediments, for Nature alone must cure as in other excoriations and wounds. these Impediments are either moisture or filthy humors, these removed, Nature nourisheth the part and heals it up. some medicines that remove Impediments are Clensers or Driers up of humors more or less, the gentle Driers breed flesh, the strongest make an Escar. we shal speak first of them that breed flesh, next of them that make the skin grow.

Medicines that breed flesh are Clensers and Driers that purge the matter that fouls the Ulcers or eats it away.

The next are dryers, which suck up the moysture which remains in Ulcers after they are cleansed, these put it into a condition fit to be cured, and breed flesh, these are called breeders of flesh, as if they did it, as we shewed in wounds; for the Impediments removed, Nature makes flesh of the same Nourishment, which fils up the Ulcer.

Others are stronger dryers, which destroy the evil Humors that corrupt the Ulcers, and make them spread; these are seldome used alone, but with clensers, that also kill Wormes if there be any, so that we shal not mention a private Cure for Wormes.

To these Cleansers we add Dryers, which are so moderate that they take away that Gleeting which remains in Ulcers, after they are cleansed, and make it fit to produce new flesh. these are called incarnatives, as if they did of their own force breed it, when Nature did it by being freed from the Impediment of Moysture, and making a Glew of the Nourishment of the part which is hurt in a Wound, and flesh in a hollow Ulcer, that grows to the sound part and so fills it up by degrees, and unites that which was divided. These Incarnatives must not dry so much as to dry up the Nourishment with the moysture, that is the Impediment, as when they are to consume a foul Humor, or make a Scarr, nor must they cleanse nor bind as in wounds, for Ulcers must be filled up with flesh, and not united as wounds, but of some that cleanse not much nor bind but dry, Incarnatives may be compounded and one and the same Medicine may cleanse and heal, more or less, as we shall shew.

Unguents or plaisters which are applyed or put into Ulcers cleanse or dry, strongly or moderately, and are as followeth.

The oyntment of the five Meals is the chief cleanser for Ulcers, that is of Lupines, Orobus, Beans, Wheat, Barley, with Honey, or Sugar, and Vinegar, if you will clense more.

Or this of Smallage, Take *Juice of Smallage one part, Honey of Roses two or three parts, with Turpentine dissolved in the Yolks of Eggs*: make an Oyntment.

Or boyl the Juice with Honey and Beanflower, to an Oyntment.

Of Milky Juyces, as of Endive, Succory, Dandelion, Sowthistle, with Juice of Smallage, Beets, Plantane, Roses, Pellitory, Avens, you may also make cleansing Oyntments.

Or this of bitter Juyces, as Horehound, Wormwood, Centaury, or sharp as Arsmart, Celandine, Orris, Onyons, or Squills, with as much Honey of Squills, Turpentine, and Meal.

To these three you may add Myrrh and Frankincense, to cleanse more, and when it begins, to be clean; Sarcocol, or when you will cleanse more, Allum, or Calcanthum, or burnt Virriol.

Or of the Juyces mentioned, you may make Oyntments with Oyl as much, with Honey and Vinegar, boyling them with other Clensers, til the Juices are consumed, and adding Pouder of Gentian, Birthwort, Myrrh.

Aloes with Beasts Gall, and Honey, is a great Clenser in corrupt Ulcers and lowsie.

You may make clensing Oyntments of Plants thus: Take *Radishes, Onyons, each an ounce and an half; Gentian and the green bark of Dwarf-Elder, each an ounce; bark of Capars and Hermodactils, each half an ounce; Wormwood, Horehound, Celandine, Smallage, each a handful*; scape and bruise them, boyl them in *white Wine* then bruise them again and boyl them in a pound of *Butter* or *Oyl* with the fourth part *Honey* to an *Oyntment*.

Or: Take *green Orris roots, Colewors leaves and Rue*: bruise them, add *Fænugreek meal, Salt*, and *Honey*, and *Vinegar*.

Or boyl Colewort leaves with Bean flowrs for Ulcers in

the Breasts, or apply the roots of *Asclepias* or Swallow-wort, or Clensers bruised.

Or Herb Robert roots and all, in pouder boyled in Wine and Oyl to a Cataplasm is good in watery Ulcers. or Rose-cake, or Horse-dung.

Of the Astringent pouders following and Honey you make Oyntments with Vinegar and Oyl, or wax and Oyl of Roses.

Or when you wil clense more: Take *roots of, Orris, Briony, Sowbread, Dragons,* and use them as before.

Or use Oyntment of *Agrippa* made of Briony, wild Cowcumbers, Squill, Orris, Fern, Dwarf-Elder.

Or this: Take *the pouder of the roots mentioned half an ounce, meal of Lupins, Frankincense, Aloes, Myrrh, each a dram and an half; Oyl omphacine two drams, Honey of Squils an ounce, Oyl of Mastich an ounce and an half, Oyl of Turpentine half an ounce*: with *Wax* make an *Oyntment*, add to make it stronger, *Tartar* and *Verdigrease*.

Or thus: Take *Briony roots three drams, Cuckowpint or Dragon roots a dram and an half, Galls, Savine or Pine bark burnt, a dram, Verdigrease half a dram*, with *Honey* make an *Oyntment*.

Or this green plaster. Take *Verdigreese three drams Myrrh, Frankincense, each half an ounce; Wax, Rosin, Turpentine, each four drams*; make a *Plaster*, or with *Oyl* or *Suet* an *Oyntment*.

Or boyl Tartar with Honey.

Or Verdigrease with Honey and Vinegar. or use Ægyptiacum which is best in filthy Ulcers.

Or Oyl of Antimony to clense, which because it cures wounds almost incurable, is called the *Wound-oyl*, it is thus made. Take *Aqua vitæ rectified three or four ounces, Glass of Antimony, Mastich, Frankincense, Aloes, Myrrh, each an ounce*: pouder them and let them stand in a warm place in a close vessel, til they putrifie them, distill them by an Alembick increasing the fire by degrees. first you wil have a *stinking spirit*, then a *sweet*, keep them close stopt.

Or mix burnt Sal Armoniack with Tartar, Verdigreese and Honey.

There are Oyntments called *Incarnatives* which heal Ulcers when they are clensed, Sarcocol and Honey is the chief, to produce flesh by drying.

Or you may make five sorts of Oyntments of the five incarnative pouders mentioned, and of other greater Driers, with Honey of Roses and Turpentine, or Oyl of Mastich, Myrtles or Roses, with wax and Rosin.

To these you may add Colophony, Pitch, Bitumen and Opopanax as much as any of the rest.

Or you may mix the flesh of Snails with the second and sixth pouder, to cloath the bare Bones with flesh again.

Or use that of *Nicodemus* by *Mesue* it is made of the first and second pouder of Aloes, Myrrh, Sarcocol, and Honey and Wine, or the great Basilicon of *Mesue*; made of Frankincense, Myrrh, Pitch, Turpentine, Rosin, Wax, That called *Aureum* of *Mesue* is so called made with Colophony and Saffron, and that called *Unguentum Fuscum* of *Nicolas* is like them, which hath Galbanum and Sagapenum, and the Triphamacum of *Mesue*, and Tetrapharmacum of *Galen* with Myrrh, Sarcocol, and Orris added, or you may use Ceroneum made of many of the same ingredients and of Litharge and Allum.

You may use other Plasters and Oyntments which glutinate wounds by drying, choosing the least astringent or those that hinder fluxes of humors which make the Ulcers ill habited.

As, Take *Galls, Pomegranate flowers, each half an ounce; Frankincense, Aloes, each two drams* with *Honey*.

If Ulcers are wel clensed you may cure them with Plants.

Thus: Take *Daffodil and Comfrey roots, each two ounces; Vervain, Burnet, Mous-ear, St. Johns wort, and small Centaury, each a handful*: or other *Wound-herbs*, boyl them in *Wine*; then take of the *thinnest part* after they are well stampt six ounces: add *Honey* and *Turpentine, each two ounces*; *of the first, second or third Pouder an ounce and half*; make an *Oyntment*.

Or thus: Take *Burnet, Betony, Vervain, each a handful*; cut and boyl them in *Wine* to the consumption of *two parts*, strain it, add *Rosin half an ounce, Goats sues two drams, Wax five ounces*, boyl them thick. when they are cold, ad *pouder of Mastich two ounces and an half, Aloes half an ounce*: make a *Plaster*.

Or thus: Take *juyce of Agrimony Vervain, Plantane and Daffodil roots four ounces, Wine two ounces, Oyl of Mastich two ounces, Oyl of Roses an ounce, Honey an ounce and an half, Turpentine an ounce*: boyl them a little, add the *second* or *third Incarnative pouder half an ounce, Gum Elemi a dram*: make an *Oyntment*.

There are others that clense and dry more or less, which alone cure not only small, but foul and malignant Ulcers. As,

These following dry more than clense. the gentlest is made of Litharge and Cerus with Oyl of Roses or Myrtles, stird in a Leaden Mortar, with a little Camphire and Gum Traganth infused, if there be pain.

Or of Litharge a pound, Oyl and Vinegar two pints boyled to a Plaster, or an Oyntment, this is cal'd *Galen's Oxeleum*. If you take Wine instead of Vinegar, it is called *Oinelæum*, if Water, *Hydreleum*.

This dries more. Take *Litharge and Oyl, each a pound; Cadmia an ounce*: boyl them, add *Gum Ammoniack and Bdellium, each an ounce; Galbanum and Opopanax, each half an ounce*; dissolve in *Vinegar, Wax half a pound* at last, add *roots of Comphrey, round Birthwort, Frankincense, Mastich, Myrrh, each an ounce*: make a *Plaster*.

Or: Take *Litharge an ounce and an half*: boyl them til they are a little black, add *Galbanum, Ammoniack, Bdellium, Opopanax dissolved in Vinegar, each half an ounce; Colophony Myrrh, Mastich, Frankincense, each two drams; Tartar a dram*, with *Wax* make a *Plaster*.

Or use the Plaster of Lapis Calaminaris made of Cadmia, Litharge, Tutty, Cerus, Frankincense, Mastich, Myrrh, Camphire, Turpentine, Suet.

Or the Oyntment called *Unguentum Rubrum*, thus: Take *red Lead three drams, Litharge two drams, Cerus a dram and an half, of both Cadmias, each a dram; Oyl of Roses three ounces, Turpentine half an ounce, Camphire a scruple*.

Another of Dogs Dung: Take *white Dogs dung two ounces, Litharge, Cerus each an ounce; Bole six drams, Frankincense, Mastich, each two drams; Bean meal an ounce, with Honey, Goats Sues and Vinegar* make a *Plaster*.

Or: Take *Tutty prepared two drams, Litharge, burnt Lead, Blood-stone, each a dram; Aloes a dram and an half, Sanguis Draconis, Sarcocol, Galbanum, each a dram*; with *Oyl of Roses* and *Wax* make an *Oyntment*.

Or: Take *Litharge, Cadmia, or Tutty, Cerus, burnt and washt Lead or Antimony, each a dram; Pumice stone two drams, Sarcocol, Myrrh, Colophony, each three drams*: with *Honey* or *Suet* make an *Oyntment*.

Or the Oyntment of Lead made of burnt Lead, Antimony, Litharge, Cerus, Oyl of Roses; is good in malignant Ulcers.

For a venemous Fellon: Take *Antimony a dram, burnt Lead, and washed Cerus, each half a dram; Tutty prepared half an ounce, Oyl of Mastich, and Omphacine, each two ounces; white Wax and Rosin, each an ounce*: make a soft *Plaster*.

These Plasters wil dry more with two drams of burnt Brass, Verdigreese a dram, or burnt Vitriol.

These clense more than dry. Take *Litharge boyled in Vinegar two ounces, burnt Brass a dram, Bole two drams, Rosin, Wax, each two ounces*; with *Hogs grease four ounces*, make an *Oyntment*.

Or: Take *Oyl of Roses an ounce and an half, Oyl Omphacine half an ounce, Cadmia and Tutty, each a dram and half*; *rust of Brass and Vitriol, each a dram*; with *Rosin*.

Or

Or: Take *Cadmia, Litharge, Ceruß, Maſtich, Frankincenſe, mother of Pearl, Coral, Vitriol, each alike*; to four ounces, add five ounces of *Wax, Colophony, or Turpentine four ounces*: make a *Plaſter*.

Or: Take *Oyl of Antimony*, Wax, *Myrrh*, digeſt them in *Balneo* fifteen daies, it is a good Balſom againſt malignant and perverſe Ulcers.

A Brain-drying Oyntment. Take *Oyl, May-butter, Deers ſuet, marrow of Ox bones, Turpentine, each two ounces*; *Litharge, Cadmia, each an ounce and half*; *Antimony, burnt Lead and burnt Braſs, each an ounce*; *Load-ſtone, Maſtich, Frankincenſe, Myrrh, each three drams*; *pouder of Earth-worms two drams*, or other drying pouder, add *wax* if need be.

Or: Take *of the pouders mentioned a dram, Pomgranate peels, flowers of Labrunca, Fennel ſeed, Aloes, Myrrh, Acacia, each a half dram*; *Bole, Cadmia, burnt Braß, each a dram*; *Oeſypus or greaſe of wool, Infuſion of Gum Traganth in Plantane water, each half an ounce* with *Oyl of Roſes*, Wax, *and a ſcruple of Saffron* make an *Oyntment*.

Or of Plants thus: Take *roots of Orris, Birthwort, Turmerick, each two drams*; *Pomegranate peels, or flowers, and Galls, each a dram and an half*; *flowers of Labrunca, Roſe ſeeds, each a dram*; *Gourd peels, Savin and Earth-worms burnt, each a dram*; *Sanguis Draconis and Bitumen, each two drams*; *ruſt of Iron three drams, burnt Allum and Chalcitis burnt, each a dram and an half*; *burnt Coral two drams, Oyl and Suet, each ſix ounces*; *Roſin three ounces*, with *wax* make a *Plaſter*.

Or: Take the Wound Herbs mentioned, *Roots, Leaves, and Flowers*: boyl them in *Wine and Oyl*: take ſix ounces ſtrained; add *Honey* and *Roſin*: and boyl them again a little, when it is thick, add *Powders mentioned, Litharge ſix drams, burnt Braſſe or Ruſt of Iron two drams*: *with Wax* make an Oyntment.

Quick-ſilver makes theſe Oyntments better againſt any Malignity, eſpecially the French Pox. Or: Take *Quick-ſilver an ounce, Turpentine an ounce and half, Hogs Greaſe three ounces*: ſtirr them well, then add *Cadmia, burnt Braß, each two drams*; *Sulphur vive three drams, ruſt of Iron half an ounce*.

Another excellent Plaſter with which I have often cured perverſe Ulcers in the Legs. Take *Litharge, Cadmia, Ceruß, each two drams*; *Frankincenſe, Maſtich. each a dram and an half*; *Birthwort roots a dram, ruſt of Braß, Sublimate, each half a dram*; *Quick-ſilver three drams*: with *Turpentine an ounce and an half, Honey half an ounce, Oyl of Roſes and juyce of Plantane, each two ounces*: make a *Plaſter*.

When an Ulcer is clenſed, heal it with Quick-ſilver, Turpentine, Sarcocol and Honey.

Apoſtolorum of *Avicen* is the ordinary Clenſer and Dryer, and it is better mixed with Ægyptiacum, or with a little Allum or Vitriol when the Ulcer is very foul, it is made of Verdigreece, Litharge, Birthwort, Gum Ammoniack, Bdellium, Galbanum, Opopanax, Myrrh, Frankincenſe, Roſin, Oyl and Wax.

Apoſtolicon Meſue is the ſame with Aloes and Sarcocol added.

Apoſtolicon Nicolai is of the ſame Ingredients with burnt Braſs and Scales, Lapis Calaminaris, Dittany, Sarcocol, Maſtich, Mummy, Colophony, Propolis, Birdlime, this wil draw any thing forth of an Ulcer.

The *Emplaſtrum* called *Gratia Dei* or Divine made by *Nicolas* is like theſe to draw out things faſtned, it is made of Litharge, Verdigreece, Birthwort, Blood-ſtone, Olibanum, Myrrh, Bdellium, Maſtich, Oyl.

Some add Galbanum, Ammoniacum, Opopanax, and Load-ſtone.

Diapalma alſo clenſeth, it is made of Chalcitis, Litharge Oyl and Greaſe.

There are more Clenſers and Driers made of Scales of Braſs, Aſhes, Verdigreece, Allum, Vitriol, by *Galen*; as the red Greek Plaſter, or the black Ægyptian Iſis, or Plaſter of *Aſclepius*, *Melium* of *Serapio*, *Diabotanon* of *Crisonis*, the Plaſter of *Terentinus*, the Green Plaſter of *Andromachus* or *Panacea Hira* and other Arabian Plaſters, and the Oyntment of *Guido* againſt corroding Ulcers: They muſt be looked for in Diſpenſatories.

There are alſo ſtrong, drying and clenſing Oyls, as that of the wild Olive, of Wheat, Acorus, Spurge ſeeds, Radiſhes by *Dioſcorides*. and others for wounds which wil cure cleanſed Ulcers, they are called *Balſamelæa*. that of *Mans dung* is commended by ſome, and that which comes from a Linnen Rag dipt in Oyl and burnt.

The ſtronger are Oyl of Myrrh and Sulphur, or a Plaſter of Myrrh, Colophony, and Wax mixed with them.

Or Oyl of Tartar by *deliquium* or melting is a great Clenſer, and againſt eating Ulcers, Oyl of Vitriol Antimony and Talcum.

Or this: Take *crude Antimony two ounces, unſlaked Lime a pugil, Tartar an ounce*, boyl them in *Lye*, then add *Vinegar* and the *Oyl* will ſwim, this is good in foul *Ulcers*.

Balſom of Sulphur is a mighty Drier and Clenſer thus made, Take *Brimſtone a pound and an half*, boyl it in *ſpiris of Wine*, digeſt it ſome daies in a *Limbeck*, take it from the *Fire* and put it in a ſtrong veſſel, add *Vitriol in pouder an ounce and an half, Tartar an ounce*, it makes a *red Balſom*. *Ruland* makes Balſom of Sulphur thus. Take *Oyl omphacine a pint, ſpirit of Turpentine two ounces, Sulphur ſix drams*, digeſt it in *hot Embers* til it be *Red*, ſtrain and keep it.

There are alſo Waſhes, Injections, Fomentations, and Bathes to clenſe and dry Ulcers.

Old Wine is a good Clenſer.

Or Vinegar and Water and Wine is a gentle Clenſer.

So is Whey wherein Barley is boyled, with Honey or Sugar.

Poſſet Curd applied warm is good againſt the weeping Ulcer, called in Dutch *Slidwaſſer*.

Water of diſtilled Honey or Turpentine clenſeth, and more if they be ſtilled together with Vitriol.

Or a Lye of many Aſhes, as of Vine ſtalks, or Fig-tree or Savin, adding Lime before you ſtrain, or boyl the Lye with Wine and Honey.

The Lye of Soap clenſeth more, called *Soap-water* thus made, of Vine Aſhes three parts, unſlaked Lime one part, boyl them to a conſiſtence for an Oyntment, uſe a little, and let it lie til the Ulcer be clean, and then heal it with other things.

This Soap-Lye is made ſtronger with Sal Armoniack.

Water wherein Quick-ſilver hath been often quenched, taken clean from the Lime, wonderfully clenſeth filthy Ulcers, eſpecially that which is made of burnt Flints, of which we ſpake in Burnings.

A pound of Vitriol and a good quantity of Water is a good Fomentation in the weeping Ulcer, called in Dutch *Slidwaſſer*.

Or Urin, eſpecially if old and ſtinking.

Or diſtilled water of Urin, with Allum and Tartar diſſolved therein.

Alſo all ſalt Waters, with ſalt Armoniack eſpecially, alſo Brine or Pickle.

Or Allum water and Camphire, which is good againſt Ulcers in the Privities.

The Water found in the cavities of old Oaks is thought to cure Ulcers.

There are divers Decoctions of Plants for Fomentations or Baths to clenſe and dry Ulcers. ſuch as are mentioned for wounds, ſome are applied green, and bruiſed or boyled. The chief Decoctions is of Agrimony, Yarrow, Ivy, Avens, Ladies-mantle, Horſ-tail, Strawberry leaves, Burnet, Bears-ears, Pyrola, Pauls Bettony, Sun-flower, wild Tanſie, Vervain, Carduus, Spondylium, Solomons ſeal, Woad, Perſonatum, Anagallis, Butterbur, Houſleek, Carrots, Colymbades, Hemlock, Plantane, Shepheards-purſe, Scabious, Gallitricum, Dogs tongue, Celandine, Wormwood, Centaury, Horehound, Smallage, Polymountain, Mugwort, Nettles, Cypreſs, Savin, Oak leaves, wild Olive,

Olive, Maſtich tree, Rhamnus, Barberries, Sumach, Ceterach, Coriander, Roſes, Maudlin, Coſtus, *Æſculapius* his Allheal, Pomegranate flowers, Comfrey roots, Birthwort, Orris, black Chamælion roots, Allheal, Sulphurwort, wild Parſneps, Aſtragalus, Fern, Anemone, Thalictrum, Alkanet, Daffodil, Pomegranate peels, Aſh leaves and Beets: Alſo Guajacum, which is proper in pocky Ulcers. alſo bark of the Palm tree, alſo Galls, Acron cups, Cypreſs Nuts, Myrobalans, Lentils, Barley, Myrtles, Roſes, Barberries, Plantane, Colewotts boyled in Wine and Water, and water with Vinegar in foul Ulcers, to Dry and cleanſe, with Acacia and Hypocyſtis to dry more.

To theſe Decoctions when you wil cleanſe more. Take *Smallage, Plantane, Agrimony, each a handful; Wormwood, Centaury, each half a handful*; boyl and diſſolve in a pint thereof *Honey of Roſes four ounces*, or in hollow foul *Fiſtulaes* and *Ulcers*, add *Orris, Hellebore*, or *Cuckowpint roots* boyled in *Lye* or *Urin* for to inject or waſh.

Or this Injection. Take *Gemian roots an ounce, Hermodacts ſix drams, Hellebore three drams, Wormwood and Centaury, each a handful*; boyl them in two pints ſtrained, diſſolve *Honey of Roſes three ounces, Ægyptiacum an ounce*: add *pouder of Orris and Birthwort, each half an ounce; Agarick, Myrrh, each two drams.*

Or: Take *Smallage, Sago* (which allaies Itching in Ulcers) *Betony, Horehound, each a handful; Radiſhes an ounce and an half, Onyons an ounce*: boyl them, and to two pints add *Allum half an ounce or Salt of Tartar two drams, Honey of Roſes three ounces.*

To dry and heal. Take *Comfrey, Plantane, Shepheards-purſe, Horſtail, Ceterach, Jews herb, each a handful; Agrimody and five-leav'd Graſs, each half a handful; Galls, Cypreſs Nuts, Pomegranate flowers, each an ounce; red Roſes, Barley, each a pugil*; boyl them, and to two pints of the ſtraining, add *Frankincenſe, Maſtich, Sarcocol, each two drams; Honey of Roſes three ounces.*

Or: Take *Litharge a pound*, boyl it in *Vinegar* and dip *Clouts* therein for Ulcers of the Legs.

Or: Take *Cadmia or Litharge two ounces, Maſtich, Frankincenſe, each half an ounce, Camphire half a dram, Saffron a ſcruple*: boyl them in *Vinegar.*

Or, boyl Allum, Tartar and Maſtich in Vinegar, or Tartar and Aloes in Vinegar.

Take *white Vitriol, Allum, Bole a pound, Camphire an ounce*, boyl them in an *Earthen veſſel*, keep the third part of the *Water*, boyl the reſt til it may be *pondered*, to an ounce of which, add a pint of water, ſtrain it, uſe the *Water.*

In Ulcers of the Leg. Take *Chalcanthum, Vitriol, Allum, Ceruſs, equal parts*, boyl them in *Vinegar* til they are hard, diſſolve a little in *Water* or *Lye* and *Wine* and waſh the *Ulcer.*

Take *Allum half an ounce, Tartar two drams, Camphire a dram, Verdigreece, half a dram*: beat them, and diſſolve them with *Aqua vitæ eight ounces*, and *three Yolks of hard Egs*, ſtrain them, this is good in Ulcers of the Privities.

Take *Peaſe, Wheat, Salt, each a pugil; Wine a good quantity*: let them ſtand in a *braſs Kettle*, and ſtir them ſome daies, add *Verdigreeſe an ounce, white Vitriol, Aloes, each half an ounce*; ſtir them ſome daies, and then ſtrain off the *Liquor.*

Or: Take *Litharge, Lapis Calaminaris, each half an ounce; Salt, Allum, Vitriol, each an ounce*; boyl them in *Water, Wine*, or *Lye*: add *Sulphur, Ceruſs, Sanguis Draconis* and an ounce of Verdigreece.

You may uſe diſtilled waters to dry Ulcers, or the Juyces of Plants with Allum and whites of Egs, before it is diſtilled.

That of Docks and Vinegar mentioned in Tetters or *Herpes* cures Ulcers after an *Eryſipelas.*

This is better in pocky Ulcers, if the Dock roots are boyled in Guajacum water.

Pouder for hollow Ulcers which cauſe fleſh by drying, and are therefore called Incarnatives, or ſtronger Driers when the Ulcer is very foul and eating.

The Incarnative pouders are firſt: Take *Frankincenſe, Myrrh, Aloes*, to glew as in the firſt *Wound-plaſter.*

A ſecond: Take *Sarcocol and* Myrrh.

A third: Take *one of the former pouders*, add as much *Sanguis Draconis, Orris, and Birthwort.*

A fourth: Take *of the firſt or ſecond pouder one part*, add *meal of Orobus, or Lupines roots, of Sulphur-wort, All-heal, Centaury the leſt as much.*

A fifth: *as much Litharge, Cadmia, filings of Iron, and Pumice ſtone to the firſt or ſecond pouder.*

The ſixth that wil cloath naked bones with fleſh again is made of *Orris, Daffodil, Sulphur-wort, All-heal roots, Frankincenſe and Myrh.*

There are other glutinating Incarnatives.

When you wil dry more in moiſt Ulcers, uſe pouders of drying Plants, as of Savin, Cypreſs, Horehound, Vervain, Groundpine, Germander, Juniper berries, Pomegranate peels, Cypreſs Nuts, Bedeguar, Gooſe-graſs, Parſneps, Securidaca, Coriander, Roſemary, Sage, Myrtle leaves, or pouder of Coral, Cryſtal, Bole, ſealed Earth-Eretria, waſhed Lime, of the ſtone Æſtus, Earth-worms, and Hoglice, rotten Poſts, and other Driers.

Or Aſhes of burnt Southernwood, Dill, Cypreſs, Savin, Tamarisk, Hemp, Gourd peels, Olives, alſo of Shoe ſoals, Paper, Silk, Purple, ſhels of Oyſters, Hedghogs, Snakes, Snails, Corals.

To all theſe pouders, add Frankincenſe, Maſtich, Pitch Gum of Nuttree, Almonds, &c.

The white troches of *Rhaſis* with Camphire, Aloes and Myrh cures Ulcers in the Yard.

Or this experienced. The pouder of Barba ſylvatica, with half a part of Maſtich and Frankincenſe, and a fourth part of Cuttle Bone.

When you wil dry more uſe pouder of Capar roots, Reſtharrow, Fern, Birthwort, Gentian, Hermodacts, Or-Cuckowpints or Dragons, Briony, Celondine, Hellebore, Agarick, Dogs dung, theſe cleanſe Fiſtulaes alſo, eſpecially if you add Chalcitis or Verdigreeſe.

The pouder of Snails is good againſt the gleeting Ulcer cald in Dutch *Slidwaſſer.*

Or this to dry and cleanſe. Take *flowers of Pomegranate or peels half a dram, burnt Bones or Coral a dram, Aloes a ſcruple, Salt or Allum a dram and an half*, make a *Pouder.*

Or mix filings of Iron or Braſs with fat clay waſht with Allum water, and burn it to pouder.

Salt of pickled Fiſh, or flower of Salt is good againſt moiſt Ulcers.

Or Tartar, or Borax, with Crabs-eyes.

Or burnt Allum, or parched Salt, or burnt Braſs.

In a Fellon called *Paronychia* when the fleſh is foul: Take *Sal Armoniack half an ounce, Verdigreeſe two drams*, make a *Pouder*, add *Aqua fortis*, dip Cotton in it, and dry it, and apply it to the root of the *Nail.*

Dry Lint is good in moiſt Ulcers often changed.

Or Sparadrap, which is good alſo in the French Pox in the Privities, thus made. Take *Guajacum pouder four ounces, roots of Gemian, Birthwort, Maſterwort, each an ounce; Rhubarb half an ounce, Centaury tops, Scordium, Betony, each a handful; Roſemary flowers and Roſes, each a pugil; Bay and Juniper berries, each half an ounce; Myrtle berries and Fennel ſeed, each two drams; Allum three drams*: boyl them in *red Wine*, ſtrain them, and to a pint and an half, add *Mythridate an ounce*, diſſolve it in three ounces of *Aqua vitæ*, dip a *Pledget* in it often and dry it again, apply a bit of it.

Somtimes we open the Ulcer that the matter better come forth in the lower part, and rouling it above, and wounds alſo, when we fear the Bones wil be infected, and in the Fellon we open the Impoſthume at the firſt before the bone is foul.

Or we take away rotten fleſh with an actual Cautery,

or a potential, especially in that malignant gleeting Ulcer called *Slidwasser* in Dutch, a Corrosive must presently be applied to that.

You must use the expulsive Ligature to hollow Ulcers to retain things put in, and let the matter come forth notwithstanding.

Remedies to heal up and make a scar are in wounds with loss of flesh and skin.

And the last of all when the Ulcers are fil'd with flesh, and the Superficies only bare they cure them.

And though Nature doth breed this skin of nourishment that feeds the skin, as it doth breed flesh in hotter Ulcers, yet because a preternatural flux of moisture hinders her, we must use Driers that Nature may do her work and make skin. This Scarf-skin differs from the true, because it is neither sensible nor porous, not made of seed as before, but of nutriment that sweats from the true skin and grows to the flesh, and then it is not called a true skin but Callus, and Cicatrice or Scar, and the medicines that cause it are called Epuloticks.

These must be stronger driers than Incarnatives to make the superficies better turn into a skin orScar, and they must be more, and therefore are to be used in a dry form rather than a moist and unctious.

Therefore Incarnatives which astringe not so much must not be used when the Ulcer is healed but changed, lest they make proud flesh, for skin they cannot make, nor Glutinaters except some of the chiefest Driers and Binders, which when they have glewed the lips of a wound heal with a final scar without any more ado, as Cicatrizers called Epuloticks do glutinate small wounds.

Pouders are best for such strong drying, if very fine and sprinkled upon the superficies, and better when burnt and not washed, for things that corrode lose their force by being burnt if they be after washed. The pouders follow.

The first: Take *Galls, Pomgranate peels and Birthwoort,* burn them and they are stronger.

The second: Take *one part of the first pouder with as much Cypress Nuts or Acorn Cups, Roses, Horse-tail, Centaury, burnt Spurge.*

The third: Take *one part of the first pouder:* add as much *Tormentil roots, or of Snakeweed, or of Pine bark, or Elm, or Oak, or Sumach, or burnt Paper, Clouts or Leather, Bones or Eg-shels.*

The fourth: Take *one part of either pouder,* add *as much of bark of Frankincense and Sanguis Draconis.*

The fifth: Take *any of the former with as much Litharge, Cadmia or Lapis Calaminaris burnt, with Bole or Chalk.*

The sixth stronger. Take *Litharge, Tutty, burnt Lead or Ceruse, each half an ounce; burnt Allum a dram, half an ounce of the first pouder, and a dram of burnt Pumice stone.*

The seventh which is strongest. Take *Brass burnt and washed two drams, Chalcitis burnt and washed a dram and an half, an ounce of any of the pouders aforesaid.*

Or use the following alone, or with the former, as Pouder of burnt Rosemary, or drying plants, barke of Goards, Plantane roots, Caper barkes, Cypress, Oak, Pear-tree, Myrtle, Fruits of the Ægyptian Thorne, or pouder of burnt shells, Coral, Ivory, sealed Armenian, or Cimolian earth, Bloodstone, Jews stone, Loadstone, and Asius.

Or Use Crocus Martis, which is a strong dryer.

Mathiolus comends Tartar burnt, with the pouder of Plantane roots, others Sulphur vive.

Of these pouders you may make Oyntments with astringent Wine or Honey, or oyl of Roses, Myrtles, or Sweet, but they will dry less, except you use the sixth or seventh Pouder.

Or Thus. Take *six drams of the sixth Pouder,* add *Antimony, Scales and Flowers of Brass all burnt and washt, each two drams; Chalcitis or Borax, and Vitriol, each a dram, with Honey* make an Oyntment, or with *Oyls,* if you will have it gentler.

Dioscorides useth Verdigrease with Oyl and Wax.

Or use this of Juices. Take *Juyce of Plantane, Vervain, Agrimony, Pears, or Quinces, four ounces,* add *red Vinegar, two ounces, Acacia, half an ounce, Aloes two drams, Litharge an ounce and half, Honey an ounce:* boyl them to a thin Oyntment.

Oyl of Vitriol in Water makes a Scarr, by strong drying.

The usual Epulotike Oyntments and Plaisters, are nutritum, or triapharmacum, or that black of Avicen made of Litharge, Oyl of Vinegar, or Litharge and Ceruse, or the oyntment of Quick-Lime, often washed, as we shewed in burnings, or the white Oyntment with Ceruse, and Litharge, or the Citrine Oyntment, that of Tutty, or of red lead, or that of Lead, or the plaster of *Lapis Calaminaris,* mentioned in Glutinaters, or *Emplastrum* [*Diacadmiæ,* of *Gallen.*

Before you use these Epuloticks, wash the wounds or Ulcers with Wine by Urine or Allum water, or Decoction of Sumach, or Currans, Rhus which thickens their Leather, and dryes, and thickens the Skin.

You may further the Cure of Ulcers, as well as Wounds by Wound Drinks, for they cleanse and drie, they are mentioned in Wounds.

These following are best in hollow Ulcers, or in Fistulaes, which be most dryed, therefore they are good in all foul Ulcers: Thus made.

Give Agrimony boyled in Wine, with Solomons-seal, Feather-wood, Burnet, *Spanila fœtida:* to drink some daies.

Or Wine of red Coleworts, with the Seeds and Madder.

A Water called the Mother of Balsom, for hollow Ulcers. Take; *distilled water of Rosemary and Sage, steeped in white wine one pint.* give it with Sugar.

Or add *Turpentine two ounces, Gum of Ivy, Frankincense, Mastike, Myrrh, Aloes, each half an ounce; Cloves, Cinnamon, Nutmegs, Cubebs, Galangal, each two drams; Saffron, a dram.* give the distilled water to drink.

An excellent water made of *Pyrola* roots and all and and ground Ivy, cutt small and steept in old Ale, two daies, with as much Album Græcum as an Egg, distill a water, and add it to the dreggs, and still it over again, give three spoonfull a morning, before Supper, and at bed-time.

In hollow ulcers, in the *Perinæum* under the stones, when they pierce to the bladder. Take *Comfrey roots, Fennel, Liquoriss, each an ounce and half, Birthwoort, half an ounce, Sanicle, perfoliata, or through wax, Saracens Consound, ground Ivy, Betony, each a handful; Hyssop half a handful, winter Cherries half a pugil.* boyl them in wine and water each a pint, give it with *Sugar.*

The Cure of a Fistula.

A Fistulated Ulcer whose inward circumference grows together, by a skin or tunicle, with Hollowness called a Fistula, is thus cured. it must be filled again with flesh, and therefore the tunicle must be taken away, and then you must use the means mentioned to beget flesh, and a Scarr, or Skin; and give things mentioned in Ulcers, to keep the body clean, that the Cure may be the easier.

Therefore for taking away of the Tunicle, use cleansers which may take it away, with the thick Excrements while it is soft and slimy. but when it is grown hard, it cannot be taken away, but with strong cleansers, all the kinds of which were mentioned in Ulcers. If the Tunicle be hard and confirmed, eat it away with things that consume proud flesh as in Ulcers, applied with Tents which will keep it open.

These are the cheif takers away of Skin in Fistulaes.

Of Juyces, that of Orris is sharp and burning, and that of Dragons Cookowpints, and Spurge, and Juice of milky Figgs, they may be corrected with milder Juyces, or mixed with Vinegar or Honey.

Oyl Omphacine cleanseth, and more with Juice of Spurge, or the like.

Paracelſus his balſom for Fiſtulaes. Take *Oyl of Bricks two ounces, Oyl of Turpentine ſix ounces, Oyl of Cloves half an ounce,* infuſe *Maſtik, Myrrh, Frankinceſe, each two ounces; Mummy three ounces,* diſtill them, pour it in twice a day.

The Chymiſts commend in Fiſtulaes, Oyl and Sugar of Lead, or Oyl or Water of Mercury.

As ſtrong Vinegar conſumes Egg-ſhels if they be laid therein, So doth it Fiſtulaes, mixed with Oyl omphacine, and Labdanum, as *Dioſcorides*, and with other Oyntments to avoid corruption.

Or uſe Ægyptiacum diſſolved in lye with a Tent.

Or this Infuſion: Take *Verdigreaſe three drams, Allum an ounce and half, Sugar half a pound, with Wine,* boyl and uſe it.

Or Take *Orpiment a dram, Verdigreaſe half a dram,* boyl them in *half a pint of wine, and four ounces of Plantane water,* Or uſe the green Water mentioned againſt Ulcers of the mouth.

It is excellent to diſſolve a little Orpiment, in Plantane Roſe, or Nightſhade water.

Or to uſe a little Sublimate with Populeon, to abate its force, or Orpiment and Honey.

A Fiſtula-water to take away and cure. Take *Frankincenſe, Maſtike each half an ounce; Verdigreaſe, Orpiment, each to drams; Allum two ounces, Honey and Turpentine, each an ounce an half; wine a pint and half.* diſtill a Water.

Or diſtill a water of Euphorbium diſſolved in Juyce of Plantane, with Myrrh, and Frankincenſe.

Or uſe the diſtilled water of mans Dung.

An Oyl to eat away Fiſtulaes. Take *Antimony two ounces, Sublimate an ounce, Honey four ounces,* diſtill an Oyl by a retort.

Orpiment alone thus prepared cures all Fiſtulaes. Take *yellow Orpiment, an ounce, calcined Tartar two ounces,* powder and calcine them in a crucible twenty four hours, powder it upon a Tile, and boyl them in water, till it is evaporated, there will be a white Chalk in the bottome, which is Orpiment prepared, the pouder of it doth cure Fiſtulaes to a miracle.

This white Orpiment ſo prepared, and put into a Glaſs, and ſet in a moiſt Cellar, turns to an oyly Liquor, which put into Fiſtulaes, is excellent.

An Hellebore root put into a Fiſtula, takes away the Tunicle.

We put a dried Spunge tyed or waxed into Fiſtulaes, or a root of Gentian or Birthwort, as a Tent to enlarge the Orfice rather then to clenſe, and the ſtretching makes the Callus thinner and ſooner come of.

If you burn a Fiſtula with an actuall or potentiall Cautery, there wil be an Eſchar, and that falling off, the Tunicle is gone.

If after this, quick fleſh appears in a Fiſtula, it muſt be cured as other Ulcers, by Incarnatives injected, and then by Cicatrizers.

They ſay that Fiſtulaes are cured by Drinks mentioned in Ulcers, but they mean hollow Ulcers not yet covered with a tunicle, for when there is a skin grown in a Fiſtula they cannot ſend their vertue ſo far as to eat off except at the firſt while it is warm, or work upon the Fiſtula when the skin is off.

Paracelſus commends this Drink againſt fiſtulated Ulcers. Take *Sowbread two handfuls, Sanicle a handful, Sophia Chirurgorum half a handful,* boyl them in *Wine,* to the ſtrained *Liquor* cold, add *Oyl of Cloves diſtilled an ounce and an half,* give it thrice a day ſhaking it firſt that the *Oyl of Cloves* may be in every draught three or four ounces at a time.

The Cure of a Callus Ulcer.

A Callus Ulcer with hard Lips muſt be mollified and clenſed.

This Cataplaſm doth both, made of Dock and Comfrey roots boyled in Water, bruiſed after and mixed with Butter.

Or uſe a plaſter of Ammoniacum with ſtrong Vinegar.

Or this Oyntment. Take *Gum Ammoniack, Bdellium or Galbanum diſſolved in ſtrong Vinegar two ounces, Turpentine half an ounce:* diſſolve it with *Oyl of Roſes,* add two drams of *Verdigreeſe,* and three drams of *Allum.*

Or uſe other ſtrong Clenſers or Eaters mentioned if the Callus be hard.

Dioſcorides ſaith that Spurge boyled in Honey or pieces of Sphondilium laid upon the Callus take it away.

Cut with a Knife or Lancet, and it will more eaſily heal.

The Cure of an excreſcent Ulcer.

An excreſcent Ulcer is when the fleſh which fil'd the Ulcer grows out for want of ſoon making a Scar or Skin, hanging forth and deforming, this muſt be made even.

By taking away Plethory if that be the cauſe, by ſpare Diet and bleeding, and uſing of medicines outward that cauſe a ſcar as ſoon as the fleſh riſeth. theſe by drying cauſe a skin and hinder fleſh from growing, but if the fleſh is grown out, you muſt not uſe them, leſt it cauſe deformity, becauſe they wil not conſume it. but then uſe ſtronger Driers and Clenſers, or things that take away fleſh, called Cathereticks, ſuch as we mentioned for Fiſtulaes, and theſe are good in Fiſtulaes.

Pouders are carried in Borax pipes for the ſame, as pouder of black Hellebore and Hemodacts, of Birthwort, Galls, Aſhes of Date ſtones, Wooll, Spunge, Salt Fiſh, Smaris and Sea-Hedghog, Purple ſhels, and Snails burnt.

Or ſprinkle ſmall cut Hemp thereon.

Or the yellow pouder of dregs remaining after the diſtillation of Honey.

Or pouder of Borax.

Or of Pumice Stone, Okar, Ætius Stone, Diphryges.

Or of Allum, Chalcitis burnt, or not mixed with other weaker.

As, Take *Allum burnt three drams, with Pomegranate flowers and Bole as much.*

Or, Take *Vitriol half an ounce, Allum two drams, Pomegranate peels and Galls, each two drams; Myrrh, Birthwort burnt, each a dram;* make *Troches* for your uſe.

Or you may add burnt Tartar to other pouders.

A Corroſive pouder. Take *Vitriol four ounces, Allum and Verdigreeſe, each half an ounce, Vinegar ſix ounces,* calcine them in a luted Veſſel.

Or make it of red Arſnick, Allum and Galls boyled in Vinegar ſtrained and pour upon as much quick Lime, dry the Lime with the reſidence of the Decoction till it may be poudered.

Or make quick Lime into Troches with Honey, and then burn them.

To make Precipitate or Sublimate to conſume fleſh without great pain, Take *one part of Quick-ſilver, two parts of Aqua fortis,* let it be ſhir'd in a *great Alembick* with a *great Receiver* and *hot Fire under,* till the *Water* is gone, and the *Alembick* broken, leave that which is *white* and *yellow,* and take it in the neck of a Glaſs, pouder it, and ſet it upon the fire till all the *fume* be gone.

The Troches mentioned in Cauteries to open Impoſthumes, and many things that burn the skin, are good here.

And Troches of *Vigo* made of crums of Bread, Sublimate, red Lead, and Roſe water.

Ægyptiacum is the beſt Oyntment to take away fleſh.

Or this, Take *Hermodacts or Agarick, black Hellebore, burnt Spunge and Pumice ſtone, each two drams; burnt Braſs and Allum, each a dram and an half; Verdigreeſe and Chalcitis, each a dram; with Honey and Oyl of Tartar an ounce,* make an *Oyntment.*

Or thus: Take *Antimony and filings of Iron, each two ounces; Allum, Sal Armæniack, Sulphur vive and Chalcanthum, each an ounce and an half; Verdigreeſe and Orpiment, and Quick-ſilver, each an ounce; ſtrong Vinegar, and*

Lye

Lye of Barbars, with Lime each two ounces: calcine them in a *Potters veſſel*, and keep the *Pouder* cloſe ſtopt in a *Glaſs*.

Anacardine Honey anoynted doth the ſame.

Or Oyl of Sulphur, Tartar, Vitriol, with Liquor or upon a Plaſter.

If nothing wil help, cut or burn away the fleſh.

My Cauſtick doth it wel and quickly.

We have mentioned compound Ulcers with tumors and Puſtles, we ſhal ſpeak now of ſuch tumors as do preſently follow both Wounds and Ulcers when the tumor is red, as Phlegmonous eryſipelated and Oedamatous Ulcers.

The Cure of phlegmonous and eryſipelated Ulcers.

Phlegmonous or eryſipelated Ulcers or Wounds which are ſo from flux of Blood cauſed by pain or the like, muſt be ſo ordered that blood be firſt revelled as we ſhewed in a Phlegmon.

Then uſe repelling Defenſatſives about the Ulcers and after Digeſters as in a Phlegmon.

The Driers that are put into Wounds or Ulcers muſt firſt cool, alſo as in the Repellers in Phlegmon ſuch as have Litharge, Cadmia, Ceruſs.

Or thus againſt Inflammation and Ulcer. Take *Juice of Dogstongue, Plantane, Willow, Nightſhade, or Houſleeke, four ounces, Juice of Pomegranates, an ounce, Vinegar, half an ounce, Oyl of roſes or Myrtles, three ounces, Ceruſe half an ounce, Lead burnt and waſht, two drams, Camphire half a dram, with Turpentine* make an oyntment.

You may uſe dryers onely when the Inflammation is gone.

The black Cerot of Vigo. Take *Litharge, red Lead earths, Roſin, Camphire, Oyls, and Greaſes, with Poplar oyntments, wine of Pomegranates, Decoction of Myrtles, Barley, Plantane, Nightſhade, wood-lime.*

In Gun-ſhot, this Plaſter is good at the firſt. Take *Bole two ounces, Sanguis Draconis, an ounce, Ceruſe, or Litharge, halfe an ounce, Barley meal an ounce and half, pouder of Earthwormes, half an ounce (eſpecially if the Nerves be hurt) dried Centaury two drams, Sewet* diſſolved *in oyl of Roſes an ounce, with Turpentine,* make a plaſter, you may add white *Diachylon* to it.

Or this, Take *Juyce of Plantane, Nightſhade, Houſleek, each an ounce, Vinegar half an ounce, Oyl of Violets, Roſes, water-Lillies, and* Turpentine, *each an ounce;* boyl them till the Juices be conſumed, add the Pouders of the Plaſter afore mentioned.

Againſt a Prick with a Thorn. Take *Juyce of Plantane, Shepherds-purſe, Nightſhade, Oyl of Roſes, each four ounces;* boyl them till the Juices be conſumed; add *Litharge, Ceruſe, Cadmia, of both ſorts, each half an ounce; Lead burnt and waſhed, Scales of Braſs, each two drams; with Turpentine ſix ounces and an half.*

In an Inflammation of the Puncture of a Nerve, uſe this Plaſter. Take *Barley and Lentil* Meal, *each two ounces;* *Bean or Lupine, or Orobus flower, each an ounce,* boyl them in *wine Vinegar and Honey, or Oxymel* to a plaſter. Then add things againſt pain, and proper for a Punctures as was there ſhewed.

For Ulcers of the Leggs with Eryſipelas, uſe Unguent of Roſes, Turpentine, and yolks of Eggs, with Oyntment of Line.

Againſt Pain in Ulcers or Wounds, from Inflammation, or Medicines, you muſt uſe Anodynes round about, as in Inflammations, as that of Cow Dung, and Narcoticks if need be. In the Puncture of a Nerve, wee ſhewed what was to be done againſt pain from thence.

If there be fear from the Puncture of a Nerve of a Convulſion, as often there is, it is good, to prevent Death, to cut in the place pricked or a little above.

The Cure of Oedematous Ulcers.

If a wound or Ulcer be Oedematous, we muſt labour to drye up the Moiſture about them which cauſeth tumor, with the ſtrongeſt driers, and then apply about things, againſt the Oedema.

The Cure of a Gangreen.

A Gangreen is the Beginning of the Corruption of a Member: and is hardly cured. Sphacelus is a perfect mortification ſo that the part is dead, and muſt be cutt of, leaſt it infect the quick, and cauſe death.

While there is any hope, and there is Pain and Senſe ſcarrifie quickly, with many and deep Scarrifications.

Or uſe Horſleeches, or apply them after Scarification.

Let the part ſcarified be fomented with hot water thrice a day.

Or with ſtrong lye of Barbers of Decoction of Lupines, or Lye of Fig-tree aſhes.

Or with Sea, or other Salt water.

The Chyrurgeons uſe ſuddain Fomentations before or after Scarification, as follows. Take *roots of Briony, Raddiſh, each two ounces; Leavs of Galeopſis, and ground Ivy, each a handful; Juniper topps a pugil,* boyl them in *Wine,* add *Vinegar* for a Fomentation with *Syrups.*

In a Gangreen in the Privities, foment with Decoction of Mugwort, Wormwood, Violets, Strawberries, Althæa, in Wine, it hath made the Corrupt Part fall from the Sound.

Or Take *ground Ivy, and Juniper topps,* boyled in *Milk* it is a rare experiment.

Dioſcorides uſeth boyled Coleworts, with Honey or Lettice beaten with Meal of Darnel.

Old Wallnutts, or the green Rinds, are alſo good.

Or Galeopſis and Briony roots and all.

Or Agrymony and Roſes beaten with Vinegar, or Raddiſhes and Salt.

Or flower of Orobus, Darnel Peaſe, Barley, with Honey and Salt.

Or this Cataplaſme. Take *Meal of Lupines, Lentils, Beans, ſix ounces, Pomegranate peels two drams, dryed Roſes a dram, Bole, Myrrh, each half an ounce; Salt an ounce, Juyce of Wormwood, or Nettles, ground Ivy, or Pomegranates three ounces, Vinegar an ounce, with Honey and Turpentine, and three Yolks of Eggs, and Oyl of Nuts, or Roſes,* that it dry not to ſoon.

Or add to the reſidence of the Decoction, for a Fomentation, *Old Wallnutts kernells an ounce and half, Meal of Orobus and Peaſe, each two ounces, Honey an ounce and half, Salt half an ounce,* make a Pultis.

Unctious things as Oyls and Oyntments are not ſo good, for they cauſe putrefaction, except it be a little to digeſt and keep the Pultis moiſt. An experienced Plaſter is made of Savin pouder, with Leaven, oyl of Lineſeed, Nuts or Yolks of Eggs, or of Tartar.

After waſhing, lay on Ægyptiacum with Allum.

Uſe Cauſticks as Milk of ſpurge, if putrefaction continue.

Or mix Arſenick, with the Pouder of Mans Bones and Mandrake roots are added, to prevent Pain, I ſuppoſe others add roots of five leaved Graſſe.

After the foul fleſh is gone from the ſound, cure it as a wound.

You may uſe ſtrong cleanſers, and that take of fleſh mentioned in excreſcent Ulcers.

The Cure of Caries or foulneſs of Bones

When the Bones are corroded Careous or black, there is Cares or rottenneſs of them in evil deep and hollow Ulcers that reach to the Bones and defile them, and it hinders cure of the Ulcer and hurts the member if it continue. To take it away at firſt you muſt thruſt medicines to the bottom of the Ulcer, opening it firſt, if it be ſtrait by a dry tent, which when it is moiſtened from the wound will ſwel and dilate it, as with a Gentian root, which alſo clenſeth, or with a ſponge bound hard, firſt take a Suppoſitory or the like, or open it by cutting.

This done put in Clenſing medicines and Eathereticks or Eaters that wil take away corruption from bones as wel as corrupt fleſh.

The chief Scaler of a Bone is Oyl of Vitriol and Antimony, Aqua fortis and Aqua Regia, all theſe I have uſed with

with happy ſucceſs in foul bones and venemous Ulcers with foulneſs of bones, and in the French Pox.

But if this cannot be taken off, as when there is roughneſs upon the bone, we lay the bone bare and make it even with a ſharp Inſtrument for that purpoſe, or we cut off that which is above til the bone be ſmooth and clean again.

Somtimes we burn the foul bone with actual Cautery, and then the burnt part fall off, from the ſound of it ſelf. This is done in divers parts where the bone is foul, and alſo in the end of the Fingers where the bones uſe ſuddenly to be corrupted by *Paronychia* or Fellon, it muſt be done preſently that the foul joynt being taken away the next may be preſerved.

This done, and the Bone made clean, you may cure the Ulcer with its proper Remedies, as the nature thereof requireth.

FINIS.

THE THIRD TOME IN TWO BOOKS; Which are the FOURTH and FIFTH OF THE Whole Work.

A TREATISE OF HUMANE INFIRMITIES.

THE FIRST BOOK Containing the Infirmities, or Diseases of the Body.

THe Infirmities of the Body are called Organical, Symptomatical, or such as cause Diseases; and many of them are to be seen and felt. Some destroy the shape and fashion of the Body: Others change the colour thereof, and are known either by the enlarging and increasing, or by Pollution and Infection, or by the decrease and Consumption of the Body.

The Diseases which destroy the shape comprehend all Organical Diseases, which are called either Diseases that abound in respect of number, as when the Parts are too many, or the Body is double, or any Part is doubled or trebled; as when there are six Fingers, too many Teeth, &c.

Or they are called Diseases where number is wanting, as when any Part, Tooth, Hair, or Nails are wanting, when there is Baldness, or the like.

Or they are called Diseases in respect of magnitude increased and augmented, as when Nails, Hair, or the whole Body, or any part thereof is over large, the Orifices too wide, or the Flesh, as Breasts, and the like, grown too large.

Or they are called Diseases in respect of Magnitude diminished, as when the Orifices are too little, or the Body, or any Parts thereof decreased and grown less.

Or they are called Diseases in Respect of unseemly Figure and Proportion, as when any Member is deformed.

Or they are called Diseases in respect of the Division of Parts, as a Hare-Lip, broken

Teeth, falling of the Nails, Clifts or Fiſſures in the Hands, &c.

Or they are called Diſeaſes in reſpect of the Separation of Parts to be united, as when the Gums are ſeparated from the Teeth.

Or in reſpect of Concretion when an Orifice is cloſed, or when parts which ſhould be aſunder grow together, or are joyned together, as matted Hair.

Or in reſpect of the evil Scituation or Poſition of Parts, as when crook backed, or the Eyes ſtand too far out, the Teeth or Nails, looſe, &c.

All theſe Diſeaſes ſhall be explained in the Chapter of Deformity, *which is the* firſt Chapter, Page 501.

Secondly, Diſeaſes which change the colour comprehend under them, Cachexy or evil Habit, Jaundies, Redneſs, Paleneſs, Blackneſs; Spots, Diſcolourings, *and all ſorts of* Blemiſhes, *and among theſe are the* roſie Drop *called* Gutta roſacea, Itch, Inflamation, or Eryſipelas, ſmall Pox, ſpotted Feavers, blew Eyes, ſpotted Nails, diverſe coloured Hair. *Theſe ſhall be ſpoken of in the* ſecond Chapter, *which treats of* Diſcolouring, Page 513.

Thoſe Diſeaſes which come from the increaſe and augmentation of the Body, comprehend under them, the Dropſie, Swelling with Wind, *the* Aſcites, Tympany, *the* Swelling of the Belly by a Mole, *or* Retention of the Terms, Wens, proud Fleſh, Ruptures, Polypus, Swelling of the Yard, Condyloma, *or* Tumor in the Anus, Gums ſwollen, Epulis, Encanthis, Oedema, Phyſodeis *or* windy Tumors, ſwelled Feet, *by* Wind *or* Water, Codds ſwollen, Head ſwollen *with* Water, Swellings in the Groins, Hydromphalon, Bronchoceten, *or in the* Throat, Phlyctænas, Hydroas, Breaſts ſwollen, Warts, Cirſocolen, Aneuriſm *or* Swelling of a Nerve, Glanduls, Scrophula's, Struma's, *both* Swellings *in the* Throat, Buboes *in the* Emunctuaries, Parotis *in the* Ears, Stones, Hardneſs, external *and* internal Hardneſs *of the* Liver, Spleen, Womb, Steatoma, Atheroma, Meliceris, *theſe three ſorts of* Tumors *which ſhall after be deſcribed: the* Frog *under the* Tongue, *the* Teſtudo, Garglio *or* Wen, Mole *of the* Head, *called* Talpa, Nodes *in the* Bones, Joynts, Calloſity *of* Bones, Nails, Skin, Scars, Extenſion *of the* Navel, Warts, Moles, Cornes, Hordeoli *like* Barley Cornes *in the* Eye, Grando, *or like a* Hail-ſtone *in the* Eye-brow, Ruptures and Herniæ. *Of all theſe we ſhall ſpeak particularly in the* third Chapter *of Diſeaſes in* Extuberance *or* Swelling *by* Accreſion, Page 540.

In the fourth Chapter of Deſœdation, Page 580. *Or Diſeaſes that come by Infection, when many Diſtempers or Infirmities come together. We ſhall ſpeak of* Elephantiaſis, *which is a kind of* Leproſie *ſo called; the* Pox, *and the like Infections.*

The Diſeaſes which manifeſt themſelves by a decreaſe or decaying of the Body, are Leanneſs, Conſumption, Tyſick, Maraſmus, Colliquation *or* Melting *of the* Body, Atrophy *or want of Nouriſhment generall, or particular, in any Member, ſhall be treated of in the* fifth Chapter of Conſumption, Page 598.

CHAP. I.

Of Deformity.

The Kinds of Deformity.

BY Deformity we here mean, the Destruction or Perversion of the Naturall Form of the Parts of the Body; and this comes to pass, when the Parts of the Body are divided either in respect of Quantity, as number and magnitude, or of quality and uncomly Figure, and so become deformed by these organick Diseases. As to discolouring we shall speak of that in the Chapter of discoloration. But if the parts swell any other way, or any thing groweth unto them, or if they be consumed, these shall be described in the proper Chapter of Extuberance and Consumption; but if these be within the Body, as *Galen* writes of a double *Porus cholidocus*, others of one Kidney, of the want of a Liver or Spleen, or the like Diseases in Number Magnitude or Figure, by which the Body is over large or decayed, if they be within the Body, and not be seen they shall not be spoken of, in this Chapter of Deformities, but in the Chapter of Actions hurt, and though externall Deformities do often hinder these Functions, yet because they appear more to the Eye we shall speak of them in this Chapter only.

A double Body.

Many Deformities are in the Body from number abounding, some come from the Birth which if they are great are called monstrous, as when two bodies are borne knit together in divers parts. I have seen a Man which carried with him another of the same bigness compleate in all his Members, except the Head which was as it were grafted to the Neck into his Breast, and he lived so from his birth a long time in very good health. The like unto which *Stumpifius* in his Helvetian History saith he saw. I also upon the fourteenth of *August Anno* 1645. saw naked in mine own house, another, who had his Brother hanging a little below his left Pap, fastned unto him by his breast, he had a great Head, with much curled Hair, his Eye-brows moved, but never opened, his Mouth was open and alwayes full of stinking slimy Flegm, his hinder part of his Head fell down to his Brothers belly, his Face being upwards his Breast was crooked and the Ribbs plain to be seen, and bent like the Keele of a Ship outward, his Shouders were very deformed, both his Anns trembled and were bent backwards his left Hand had the three last Fingers; his right, a great Thumb and two Fingers, that next to the Thumb was least and grew thereto, from his left side his left Thigh hung downwards bowed, with a short crooked Foot, and onely four Toes, his Heel being turned outwards, you might plainly have perceived his right Foot to be inclosed in his Brothers left Thigh, as if he had two thigh bones, between the Thighs were the Buttocks and a cleft but not open, his brother cloathed him with a shirt doublet Breeches and Stockings. This Monstrous man, was very active, of good Habit of body, well coloured, witty, long winded, he told me he was Son to a noble Merchant of *Genua*, his Fathers Name was *Baptista Collaredo* and Mothers *Belevina Fraginetta*, of the Family of the *Forum Julianum*; and because his Parents and the Priests saw that he was a double Man, he was baptized by the Name of *Lazarus* and *John Baptist* he was then twenty eight years of Age, when I heard from him and saw these things.

Double and treble Parts.

Histories also witness that some are born with double Members, Heads, Arms, and Feet and other lesser parts, it is usuall to

Six Fingers.

see six Fingers upon a Hand, two Thumbs one lesser growing to the greater, sometimes

Three Stones.

six Toes upon one Foot and seven upon another, some have three Stones one Cod, (these are called *Triorcheis*) and this is very probable to be as well as in other parts of the body: but this I have found by Experience, to be a hard excrescens growing to the semenaries being insensible, but like a stone.

The Teeth do not alwaies keep the same number, some have two ranks of Teeth beneath which doth not deform or hinder.

Hairs because numberless, are disorderly when they are in places improper for them and so are a Disease in number increased; but when they abound they are a Disease in magnitude increased, where we shall treat of them, because then hairs do not grow anew, but they which were before in the Pores, (for there is no Pore but hath a hair in it) hidden and concealed, do then grow manifest.

The Want of Parts.

The greatest and most usuall Deformities are in the deficiency of number, as when some Instruments are wanting in the birth: as we have seen some monsters wanting both Arms, who have written and done other things with their Feet instead thereof, as I saw *Anno* 1652. *Nov.* 29. a Woman born without Arms, which gave her Child such and carried it like a Nurse, making also divers things with her Feet and with more dexterity then many could do with their hands. Her Name was *Maudlin Rudolphs* of *Thuinbue*, in the chief City of *Sweedland* being above forty years of age, and the year after *February* 20. I saw one that way a crooked Dwarf born without Arms, that exercised all things with his feet which were to be done with hands with dexterity to the admiration of the Beholders, his Name was *Theodorick Stieb* of *Vienna* an Austrian. These are rare, but the number of the parts is more usually by chance then by birth, as by imputation which happens to parts that are most extended, as have Feet, Fingers, Nose, and Ears, or when the Eyes are put out or flesh is lost from them, which is called Rhyas. Hither may be referred gelding,

Rhyas.

which though it be not in an apparent part and brings no Deformity apparent, yet because when both Stones are cut out, other Deformities follow, especially if it be done in Youth, which will declare them to be Eunuches, as a womanlike voice, want of a beard, so it causeth Deformity apparent.

Want of Teeth.

The Teeth are often defective in number, not only in age which is common to all, but many loose their fore teeth, which is an uncomely sight when the Mouth is open, but this is no defect in Children for they will have others succeed. The grinding teeth are also often taken out for Rottennes by which their number is fewer.

Fall of Nailes.

We have observed that the whol Nailes both of Toes and Fingers have fallen off of their own accord, and sometimes others have grown up and sometimes not, these are difficultly taken of by force.

Want of Hair. The loss of Hair is usuall, especially in the Head, where being longest they cause the greatest Deformity being wanting, as when there is Baldness all over, this is ordinary to old and sometimes it befalls young People.

Alopecia. The Disease called Alopecia, is a falling of the hair from some long and violent disease aforegoing, leaving the head bald in

Ophiasis. divers parts or equally about the hinder part of the Head and the Temples when it comes from the Pox, or when two bald places reach on both sides from the hinder part of the head to the fore-head as in Ophiasis.

The same happens to the Beard, the hair falls off inordinately and leave it thin or the Chin bare, and this is when the hair of the Head falls most usuall, and it is so with the Eye-brows and Eye-lids: and especially in an Elephantiasis or Leprosie, the same sometimes befalls all other hairy Parts.

The over largness of the whole Body. The Deformity which is from magnitude increased hath two kinds, first the increase of parts beyond their prescribed bounds which is commonly originall and this sometimes happens to the whol body, not when one Man is bigger then any in that Country with Proportion and strength agreable without impediment, this is not I say preternaturall, but when the body is so excessive long or big as the party is burdened therewith and cannot exercise his functions. deforming rather than setting forth the structure. Such monsters are somtimes seen and I saw a wench in *Dutmer* in *Basil*, not five years old bigger then any ordinary fat Woman.

Over great parts and over large Orifices. The parts also of the Body are often bigger then ordinary and so bring Deformity and hinder action; some are born with too big a Head, some whereof we find to be fools, some have Necks, Feet, Fingers disproportionable, a long Nose, broad Ears, great Eyes, long and large Teeth, especially when one Tooth groweth into the cavity of the opposite Tooth which is lost, hitherto belong the over large Orifices a wide Mouth, Nostrils, and other parts too large, these are Deformities but not Diseases except they hinder actions, as when the Tongue is so big they cannot speak, and Nayles so thick that they cannot take up small things; besides which faule if they grow too long they are inserviceable, this is rather from neglect of cutting then any other thing. The like may be said of Hair if it

The too great increase of Nayles and Hair. grow too long for want of trimming, either in parts where it usually or not usually groweth, as when it covers the Forehead which is vulgarly counted more comely when bare; especially it is counted very unseemly for a Woman to have a beard, in which places if the hair be shaved yet the roots remaining it will grow again and shew the Deformity, sometimes one are more hairs growing in a Wart, deform the Face, if they grow where hair should not be, as upon a womans Chin resembling a beard.

Too much Flesh. The other kind of Deformity from magnitude increased, comprehends Carnosity and Fatness, and this is when from the aboundance of flesh or fat, the Body or any parts thereof are so increased, that it lookes not onely unseemly but is slow, heavy and unwildy to perform duties, these are for the most part idle sloathfull and drowsy, and if they be so when yong they live not to be old, as *Hippocrates* saith fleshy Men are shorter lived then lean: this may be in some parts so that a Deformity and an impediment may arise, as when the belly is so fat that it extends it self without measure, or when the Papps are too large, and

Great Breasts. cover the whol Breast and would go farther if not restrained, and hinder breathing by their weight: such are those fat Men who have great breasts; and which is more preternaturall, those which have breasts grow very large as well as Teats being men not grown or other wise disproportioned.

Hitherto may be referred the Sarcomata which are not other but the same Flesh over grown as rank Gums, the Caruncles of the Eyes too large which is called *Encanthis*. But because these are like the other Sarcomata, they are described in the Chapter of Extuberances.

A Deformity arising from magnitude diminished hath two kinds, as that of magnitude increased. The first whereof if when the wholl body is little from the birth and they continue all their lives like pigmyes, are maintained in Princes Courts for admiration being unfit for any imployment by reason of the weakness of body.

Smalness of Body and its parts with narrow Orifices. The second is when the parts are diminished as when the Head is too little as is seen in fools often: when the breast is too straight, by which means they are short winded; and other parts which from their originall have not a due proportion with the rest, if they bring any Deformity or impediment.

Phimosis. Hitherto is referred the straightness of Orifices, as of the Womb, the Skin of the Yard (in that Disease which is called Phimosis) when it is too straight so that the Glans cannot be uncovered by reason of the straightness of the præpuce or foreskin.

Lame Parts. The greatness of parts is often made less, when some is taken off, and the Members are partly lamed, which brings the more Deformity, by how much it is more visible as in the Nose and Ears; and the action is most hindered when it happens in a necessary part as the Fingers, which being quite taken off there is a hurt which belongs to those that are in number defective.

Breasts consumed. Hitherto belongs the want of Papps in Womens breasts, which is not only unseemly, but hindereth their giving suck.

Gums rotten. The consuming of the Gums is under this Head, when the Teeth are bare at the Root, causing them to be loose and fall out.

Short Teeth and Hair. Hitherto may be referred those Teeth which are shorter then the rest in the same rank, and Nayles when shorter then the flesh, for then they cannot take up small things.

Wool-like Hair. Hairs also when they are so thin and short, as happens when they grow again after fallen off; so that they look rather like wool then Hair. Or if in those parts where they ought

Beard long growing. to be thicker and longer in due time, as the chin where mans beard should grow hair come forth slowly and make them who are men seem still Children, this is a kind of Deformity: es-

Want of beard in Eunuchs. pecially if by reason of Gelding before the beard grew, it never come forth; and they remain beardless, it is uncomely and makes them wrinkled in the face as years increase, and as the Comædian saith look like old Women.

Slenderness of Body. The second kind of diminished magnitude is Slenderness, which is opposite to Fatness and Fleshiness, and this is seen in those parts which should be fleshy and are not; and it happens sometimes to the whol Body, not when it decayeth of which we shall speak in the Chapter of Consumption nor when it is naturally small, for then it is not out of order since lean folks as we shewed from *Hippocrates* are longest lived: but when it is so lean, that it is ugly to be beheld,

Slenderness of Limbs. and causeth weakness, especially when the Thighs and Arms are withered, the Cheeks fallen, the Shoulders blades stick out, and the Belly shrunk in. Hitherto is referred the thin-

ness

Soft and lank Breasts. nes of Womens breasts which is a Deformity, not when they are little, for that is accounted an ornament, but when they are lank and hang down this in young Women especially is accounted unseemly.

That Deformity which comes from the undecent figure and proportion of parts is manifold. The first is when the Figure is altered in number and magnitude, chiefly from inequality: sometimes from the Birth sometimes by accident. As when the Head is too sharp pointed or otherwise deformed, the Forehead wrinkled, the Nose crooked the Mouth and Lipps awry, or any other part is disproportioned. To describe all these punctually would be very superfluous, and ask much labour.

The indecent Figure and shape of Parts.

Hairs too curled. Hitherto may be referred the over curling of Hair like black Moors, which if a little curled is an ornament, and hair hanging straight down is unseemly; also Nayles if wrinkled and standing forth are ugly.

Nayles uneven.

Division of parts which ought to be united. The second kind of the Figure of parts deformed, is when that continuity by which they ought to be united is divided, or the connexion dissolved. This we spake of concerning wounds and ulcers, but if after Cure the same Division and separation remain which spoils the Figure and Proportion, that may be referred to this Head.

The division of the upper Lip or hair lip by nature. As also the which comes from the birth. Among which is the hair Lip when the upper Lip is divided originally called in dutch *Hasenscharten* from the hare, whose Lip seems naturally divided as if cut, this deformeth the Mouth by making the Teeth alwaies appear.

The Rottennesse and breaking of Teeth. Hitherto may be referred the inequality of Teeth when they are broken and rotten, by which Women seem uncomely. To this the Poet alludes in his Remedy against love.

If Teeth shee want then cause her often to laugh.

This is worst when the teeth are black, and when there are only stumps remaining.

The Rottennesse, roughnesse clifts and dividing of Nayles. The Nayles having continuity divided bring Deformity, especially in the hands because most visible, and this is worst if it go not away as the Nayles grow and are cast off; Roughness and corrosion is worst when the Nayles are black and blew or too thick; to this head may be referred, the cleaving or clifts of the Nayles when they are divided long wayes or transverse, these are the signs of Elephantiasis French Pox and the like.

Fissures of the Hair. Also the fissure or cleaving of hair in the head or beard is uncomely, because it causeth inequality and folding, especially if many be so cloven.

Dandruff. To these are added those deformities which proceed from the scarse Skin separated from the Skin, not as they cause pain but uncomliness, of which we speak concerning excoriation and galling: they are called Furfures because they fall off as dandrow from the Head scratched or combed. This if usuall, and falling thick upon the cloaths, is a Deformity especially if it fal from the beard or Eye-brows, or from other places where hair groweth not.

The Scales in the palm of the hand called in French Pelatella. Hitherto is referred the Disease in French called *Pelatella*, as when the skin is unequally divided in the Palm of the Hand, and full of Scales, which though it itch not they are alwaies picking which is noysome.

The separation of the Jaws from the Teeth. Those Deformities which come from the dissolved connexion of parts, if thereby the part be wholly taken off, they belong to the Diseases of number deficient: but if they still stick to the Body, they belong to this kind, as when the Teeth are loose and bare at the Root and will not be fastned to the Gums.

The continuation or growing together of parts that should be divided. The third kind in which the Figure and proportion of parts deformed, is when parts that should be divided, continue and grow together as comes to pass by birth as well as by accidents divers waies, by which the Functions are hindered, as when any Orifices are closed as the Nostrils, Lipps, Eye-brows, Fundament. Womb, the hole of the prepuce, when either by birth or other accident, breathing, eating, seeing, evacuation or generation is hindered. As also the glewing together of some parts, though it be not hurtfull, it is ugly, as when two Toes grow together, which often is from the birth, but it is less offensive then the growing together of the Fingers.

An indecent and firme conjunction of parts. To this preternatural continuation of parts, may be referred that by which the parts are conjoyned, so that they cannot be separated. As when from a Convulsion the Mouth continueth closed, which because it rather hinders and takes away action then deformeth, shall be mentioned in hurt Action. Hitherto belongs the mutuall and close intrication of hair which cannot be separated, but is like a love-lock which the Germans cal *Scherlein Sept* because it is supposed to be done by the fayries and the incubi.

The Deformity of situation from luxations and fractures. The fourth kind of Deformity in Figure, is when the scituation of a part is perverted or transmuted, and one part inclined or translated into an other, by which the continued Figure of the Member is destroyed.

Vari crooked Legge. Such is that which happens to the Feet, when they bend inward or outward. And that in the Toes, which are continually used to straight Shoes, and so in time are bent awry, and sometimes laid upon the Foot. As also abreviation, elongation and crookedness of Members from luxations and breaking of Bones in divers parts belong hereunto: these spoil the Figure of the part as well as hinder the Functions.

Gibbous or crooked Backs. But chiefly Crookedness of back which destroys not only the shape of breast and back, but makes the whol body short, crooked and unhansome, brings Deformity to Mankind.

Hitherto may be referred the Rupture or Falling of Entrals into the Cod, or other parts, causing Deformity. But because then the tumour and falling forth is rather to be thought upon then the deformity, it shall be spoken of in Diseases of Excretion, in Extuberances, Tumors, or things thrust forth of the Body.

Gogle Eyes. Also to this Deformity which comes from the perversion or altering of the scituation of parts; belongs, Eyes sticking forth, or prominency so called, when the Eyes are too much outward; and yet without offence or hurt, but yet uncomely whether it be from birth or accident. Also here we may comprehend the loosenes of Teeth especially those before. We have seen some who could bend the whol row of Teeth before, foreward.

Loose Teeth.

Teeth hanging forth. Also Teeth hanging forth, though fixed, are unseemly, and when they are not placed even, and Nayles also when out of place or moveable, though they presently fall not, yet are a Deformity.

Loose Nayles.

The Causes of Deformity.

All the immediate Causes of the Deformities mentioned, depend either upon adherent, as adventitious causes; those

those are inherent which come from the birth, as we have declared and they consist either in number or magnitude abounding, or deficient; or in uncomly shape, when parts are not rightly proportioned or divided, or when they are continued or grown together.

The indisposition, plenty or want, commistion or permutation of the parents seed is the cause of Diseases naturall in number, magnitude and figure, in the Body or members as in the Teeth Nayles, Hair.

And this comes chiefly from the seed of the Parents, of which all parts are made, and Children sometimes resemble the Father somtimes the mother in likeness and sex; and if the seed be unclean, not only the externall members of flesh and skin receive the same, but also the hair and the Nayles; because as I have shewed in my Anatomy, they are cartilagenous parts, neither do they come from Excrements, as is the vulgar Opinion of hair: but from that seed in the first procreation, as is to be seen in Infants or Embryons. But after what manner the Father or Mothers seed should propagate these Deformities to their Children, is a hard Question, nor otherwise to be defined, but from some indecent indisposition of the Seed, which coming from all parts, it receives from the corrupt; and as they offend in figure, magnitude or number, so doth it impress the same in the Childs formation, in the same parts, producing either the like in part of the same Deformities. But this doth not alwaies happen, that when any parts exceed or are defective in number or magnitude, the Child should have the same, for often children have their Members compleat, which the Parents have wanted by birth or by amputation; though in some they are weaker. But in the hair of the Head and beard, we see often that they are more or fewer, thinner or thicker, and of divers colours like their Parents in the Children, as we shall shew in the Chapter of discoloration. And it is plain that it comes from the Seed, and is hereditary because black Moores have black and curled hair all by Nature, and the cause is the Seed which produceth an obliquity in the Pores of the Skin, so that the hairs which comes through those Pores not directly but obliquely, are curled, so doth the Seed cause these matted locks which some have by the formation of the Pores, when many oblique Pores are joyned together in the skin, from whence grow more hairs in a little place, being curled and wound together, and they are born so.

It may also come from the plenty of Seed, that more and greater parts then are needfull be produced as the contrary from the defect thereof which as it may be in any part, so in the Teeth and Hair that they may be more or fewer. Also the Child may have an unnaturall shape from some other transmutation and commixion of Seed, as by the commixion of two seeds conceived, and their mutuall concretion in certain places, (except they be separated) it may chance that two Children may be brought forth of divers figures: which permutation and commixion of seed, as it may come from divers causes, so from some impression which the Mother conceives either in time of conception, or when she was great with child, from fear or other affection, or from strong meditation or imagination. As she which being great with child and longeth for some kind of meat which is not fit, produceth a Child which deformity either in number, magnitude, or figure. By which means sometimes it hath as it were new parts resembling others, or something resembling the thing described; adhering to the body from the birth. And among others, we have seen a child have hairs like those of a Mouse upon the Thighs, because the mother being great, strook upon that part with her hand when she drove away a mouse. Many monstrous births have been by these means, which happened from imagination divers wayes, so that Children are many times unlike their Parents, because in the time of conception, and when the Woman is great, they have thought upon other people.

This dissimilitude or unlikeness is more incident to be from mankind then any other creature, because it is subject to more intent and strong meditation and phansie, other creatures only exercise their senses or things before their Eyes in the time of copulation, and so cause a resemblance in shape and colour: as we shall shew in the Chapter of discoloration.

The Mothers Blood is the cause of some Diseases naturall in magnitude increased or diminished or indecent Figure.

Some originall Deformities may arise from the Mothers blood because the child is there with nourished while it is in the womb; not such as are in number of parts increased or diminished; (because every part proceeds from the seed,) but such as are in magnitude exceeding or defective, or in uncomely figure or shape. These Deformities come from the Mothers blood either being too much or too little, or from the change or commixion of the same, as we shall declare when we speak of internall causes.

Divers kinds of deformities come from externall causes as when any hurt or wound divideth the continuity of parts and so spoils the shape, if it be in a sensible part and causeth pain: we have spoken to them in the discourse of pains. Also an unseemly figure may come from an outward force which dislocateth the parts, or breaketh them in regard that there is then a loss of motion in the part, we have spoken thereof in the Chapter of immobility where we spake of Luxations and Fractures.

Other deformities of this kind which are in number magnitude and figure come from divers causes either internall or externall.

A wound or an Ulcer is cause of the lameness or taking off of a part, or separation or division.

The distempers and faults of the parts which produce deformity from externall causes come after divers manners: as when by a wound they are cut off or lamed, either by chance, or by chyrurgery through necessity for preserving life, as when the parts are consumed by an Ulcer, by exulceration, or often rubbing or when the dead part is cut off in a Gangren; or when in a Rupture the Stones are cut off as sometimes they are, or when the continuity is dissolved by wound, and the wound healed there remains a separation of the parts, or when by externall force, the Teeth either through pain, or other affliction are pulled out. The hair falls either by accident externall or by industry, or by Disease called *Tinea*. The Eyes by violent passion, sometimes thrust forth themselves. Or when by mastichation and biting of hard things, especially if of long continuance, the Jaws are separated from the Teeth; by which the Roots of the teeth being made bare, they are less firm then before; and sometimes fall forth, especially the Foreteeth, having but one Root, when others will scarce fall out except there be an attenuation of the Roots, as we see in dead mens Skulls the Teeth firm and unmoveable when all the flesh is gone. The teeth also are broken by strong biting of Bones cracking of Nuts, &c. It often falls out that they which pick their Teeth with a Kinves point from a foolish custome, very often do not only take away their smoothness, and make them rough, but wear away their substance by continuall scraping.

Force externall causeth falling out of Teeth, or loosenes or wearing of them, the fall of hair, and gogle Eyes.

As the other cause was violent, so may often use of very hot Meats, so burn the teeth that they may be dryed up at the Roots and be no longer firm, but very loose in their places, and then they offend in scituation, or in number if they fall out from that cause. Or, if by the same Heat of meats the hard substance of the teeth be over dryed, and at length burnt they fall out, or some part crumbles of, and the rest remains broken and weak, or they

An outward vehement heat is the cause of loose Teeth, or falling off them out, or breaking of them.

they become hollow.

And this is the usuall cause that young people have so many hollow and unsound teeth, especially when they eat very hot meats and broaths, which least they should burn their mouths they commonly blow upon first. This is the chief cause why our Germans which love hot broaths so much, have sooner bad Teeth then other people: which is imputed through ignorance to defluxions of Rheum when as we shewed in the pain of the teeth, defluxions cannot fall upon the substance of the teeth. The swallowing of hot meats and presently drinking cold Drink thereupon while the teeth are hot which many have used from their Infancy, causeth teeth to rot and fall out, before they are old, or at least by the sudden change of heat into cold to turn back.

Great heat the cause of falling of Hair.

From the like Heat the Roots of Hair being dryed and extenuated, the hair can no longer stay in its Pores, but fall out by the least combing; this is caused by hot water or fire coming to near, therefore when they have killed a Swine they use hot Water to take off the hair, and to take off the Feathers from Poultery, by which means the Roots of the Quills are so dryed that the Feathers fall off; and some loose their Hair after the same manner, provided that there be not such a heat as to stop the Pores and astring the Skin so that they must come both off together; as it often befalls them that dress Hogs with too hot water, this mistake is called in dutch *Berbrmen*, these are the causes, neither can hair fall by moistning the Skin and opening the Pores only, except the water be very hot, though it be long used with a moderate heat it will not do the like, and after the other way the teeth will also come forth.

Also Nayles and beasts Hoofes with greater heat will come off.

Corroding and putrefying Medicines are the cause of consuming of the parts and fat of Hair.

The tender parts may be consumed by knawing and rotting Medicines as the Jaws and flesh in the Eyes &c. and there are things called *Psilothra* or *Depilatoryes* which take away hair by Art; these do it rather by consuming the Roots of the hairs then by opening the Pores.

Some of the Deformities mentioned come from internal causes namely, from divers Humors and Diseases or by one part forcing another, as I have shewed, as by Blood, since the parts are not only nourished and augmented by it so long as a Man groweth, but after whatsoever is consumed is restored by the same. And this consuming of parts comes from the Blood divers waies, either in respect of its Quantity and the Fatness of the parts; if the Blood abound in quantity it makes the parts too fleshy by too much Nourishment, and this is not only when Bodies are growing but afterwards, and then they grow exceeding fleshy, and if this come not hereditary from the seed and blood of the Parents it must needs come from Blood. Hence it is that plethorick Bodies are so carnous or fleshy, of which Plethory or Fulness as there are divers causes, so often and plentifull feeding is not the least. This Appetite is stirred up by exercise of body, because by that Meat is quickly distributed; therefore Men that exercise moderately grow fleshy and gross, as it was with the wrestlers in old time. Rest also which is the contrary may cause the same, for they which are idle and sedentary, and given to much eating, seeing they spend little of the substance of their Bodies, and still are devouring grow very big and gross. This grossness may also come from the suppression of Naturall Evacuation of blood. Hence Women at that time when their courses leave them, although formerly when they had them constantly and nourished their Children they were lean and slender, grow very corpulent and gross. From these causes you may gather that as from the aboundance of Blood flesh is produced so by the want hereof there is Leanness and Slenderness.

Plenty of Blood is the cause of much Flesh.

The want of blood cause of leanness.

But as the blood causeth flesh to be more or less so it maketh some parts to be greater or lesser, as when the Juyce made thereof, is more proper or less agreeable to such a part. This is so in that time wherein people grow as then both soft and hard parts as bones increase, but after only those parts increase which are decreased by externall injuries, as in the teeth Nayles and Hair, but after a divers manner, for in the Teeth if one be not worn away by another which is opposite, in chawing, then the nourishing juyce abounding makes the tooth that hath no opposite to grow longer then the rest; but in the Nayles and Hair if they have too much Nourishment, they grow not only soon longer but thicker. The cause of Nayles growing so, is strong motion about the Roots thereof, when the Hands are often violently exercised and there is an extraordinary attraction of Juyce, hence is it that labouring Men have thickest Nayles. This also may come by often paring, especially if before they be bathed in warm water, for then the juyce attracted makes them by degrees more thick. The same is in hair which when it first comes forth like down upon the Chin if it be often shaved growes apparently thicker and longer. It may also happen that from the defect of that juyce which nourisheth Nayles and Hair, that that which growes after cutting is thinner then the former. But it is more usuall that they should fall from the dryness of the Roots for want of Nourishment, especially hair, wherefore when Medicines are made for growing of hair they attract juyce by their heat, as we shall shew in the Treatise thereof, by which the Root is mantained, for the want of juyce is the cause of baldness; for though hair grows upon the Skin of the head and continue some time there, yet after some long before aged, some at the aproach of old Age grow bald, because the Head grows less fleshy and is made up of bones, skin and membranes, therefore that part is soonest dry, and so becometh bald. This may come also from externall injuries which dry the body, as from internall Cares, from which Histories mention that Men have not only become gray suddenly by drying the hair, but also bald by drying up the Moisture. In other parts of the Body, as the Nayles if from the same juyce which nourisheth other extuberances arise, in regard they are tumors we shall speak of them in their order.

The abundance or want of nourishment is the cause why some parts are bigger then others as Nayles, Hair which grow thick and long or fall.

There is also another Fault in the figure of parts from the abotndance of Nourishment, for by the nourishing juyce, some parts that ought to be disjoyned are united; for if the Skin be taken off, and parts by Nature separated be laid together, the juyce which cometh forth from both will unite them: for this like Glue, conjoyneth wounds and bones.

The nourishing juyce sweating forth is the cause of uniting the parts.

If the Blood be fat the body is fat, if lean it is lean, for seeing all blood consists of a fat matter, as Milk of a buttery matter, and thatby sweating from the Veins in the membranous parts and not by congealing through cold as it was supposed, in regard the Body is alwaies actually hot inwardly, but of its own Nature grows together, being separated from the Blood, and so joyns to the Members as Glue increasing the substance of the Body; as there is more or less of it in the Blood so there is more or less of it gathered together for the increase of the Body, from which cause rather than from Flesh are bodies greater or less: but this happens not to the whol Body but to those places in which Naturally fat is used to be more then in others, as in the Belly,

Fatness in blood is the cause of fatness in body and the contrary.

and breasts of Women &c. The reason why there is more or less fat in Blood is from the quantity of blood, for in much blood there must be much Fat, and hence Bodies grow more fat and fleshy, or more lean and thin. But if Blood, not only in regard of its aboundance hath much Fat in it, but also of its own Nature, though it abound naturally in quantity, be over fat, which appears by that which swims at the top after it is taken out, which the vulgar Chyrurgions call Flegm, then those Bodies are more fat than fleshy, which Fatness comes not only from the constitution which is inclinable thereunto, but from eating fat Meats with which some are much affected.

Evil ulcers are causes of consumption of parts.

The Gravel of the Teeth makes the Gums separate.

The cause of loose Teeth is a defluxion into the places where they are set.

Also divers kinds of Deformities proceed from Humors and Diseases, as Diseases of number deficient, if not from externall causes, as in Ulcers some parts are consumed by suppuration and corruption; which as in other parts, so in the Eyes and Nose, and Gums, which usually are separated from the teeth by the gravell that grows underneath upon them, and by which they are hindered from uniting together. Also the Loosness and Falling of teeth, comes from a Defluxion into the the holes where they are set, which moistneth and loosneth the Fibres and Membranes by which they are knit. And also when any corrupt Humor is in the places where they are set, it causeth them to fall out by corroding of their Roots. As we have observed in great Diseases, that the Teeth have afterwards fallen out. And in the Pox by the use of Quick-silver after a Flux of spitting, the teeth have been loose and sometimes fallen out.

Also a corrupt Humor about the Roots of the Teeth causeth their loosness and falling out.

A Feaver causeth Hair to fall off.

Also the Falling of hair come from Diseases and evill Humors, when the roots are dried or made less and consumed thereby. This comes from burning Feavers, which do not onely dry the Body, but the Roots of the Hairs which are soft, and so they are attenuated and consumed, as we may observe in the declination of Feavers;

An evil humor about the roots of the Hair causeth it to fall off.

In the Alopecia and Ophiasis, when evill Humors are gathered about the Pores of the Skin, they eat and consume the Roots of the hair, and make them fal: this they do by their sharpness and maglignity; and not by loosning them with their moistness as some suppose, because such Humors as are only moist and not malignant and sharp, do never cause Falling of Hair. Which Humors as they may come from divers causes so especially they be sent thither by an acute Disease, and by Heat the Root of the hairs may be dried, which may cause the Falling of hair. And it is manifest that this comes from malignant Humors, because in those Diseases which are venemous and fix more upon the Skin then upon other parts, and produce divers Deformities thereon, as in the Elephantiasis and French Pox, the hair chiefly falls away in those places whereunto the Humors have most resorted.

The heat of a Feaver is the cause of impression upon the Nayls and of their loosnese.

In the Nayls also, as we have said since they are of the same cartilaginous Substance with the hairs, and stick only to the Skin as they do, the same thing may happen: and may suffer from the same causes, with the hair, and fall wholl off from the Fingers, but more seldom, because they are Naturally more firm: yet sometimes from the heat of a Feaver they grow dry about the Roots, or partly consume: and after when the Feaver is gone they grow again with an Impression upon them and a kind of separation.

An evil Humor is the cause of the corrosion and filthiness of the Nayls.

Also from an evill quality such as takes away hair in the Elephantiasis and French Pox, the Roots of the Nayls may be infected, and receive such a blemish, by which though they fall not off alwaies, as hair doth, or be consumed, yet they may have such a filth that they may appear ugly and deformed thereby.

The teeth and nayles throw themselves off by new.

Also the number of parts is diminished by another part thrusting off the former; as in the teeth, which in young people grow up by degrees till they throw out the old. This is also but seldome in Nayls, a new growing will cast off that which is above, and this is from aboundance of Moisture.

The Cure.

The abounding of some parts.

That Deformity which ariseth from number abounding if it come from the Birth, either in the body or any Member and cause no impediment, in regard it cannot be cured but by cutting off, must not be attempted, except it may be taken off without danger of life or lameness, But if it hinder not much and may be taken off without danger, then you may adventure; as when there is a Tooth too many, which hinders chewing, which is seldom, you may pull it out. A sixth finger being yet small and weak may be taken off with a Rayfor or Pincers, which done, as we said in wounds, you must presently stanch the blood, and cure it accordingly.

The taking off of the sixth Finger.

The cure of the want of some parts as of the Stones.

If any parts be wanting either from Birth or chance, as when the Stones are cut out, they can no waies be restored, neither in Man or Beast, as they may in Plants whose branches being cut off grow again, Nature doth this but not Art. Therefore here is no need of a Physitian but for the preventing of the perishing of a limb by keeping off external injuries, and diverting of other Causes.

The artificiall reparation of parts lost as a Foot, a Hand, an Arm, a Nose, an Eye.

Yet there are some who restitue Deformities, by artificiall Instrument, to supply parts that are lost; make new Feet, Arms, Hands artificiall, which are sometimes so flexible by Joynts that they afford some use for going and holding. That horrid deformity of a lost Nose, is repaired by a painted one: and I have seen an Eye so artificially made of Ivory, to be taken out and put in again without pain, and constantly to be worn so that none could imagine it to be other then a true Eye, only it moved, not and the place was moister.

The Cure of Teeth lost.

The teeth falling by chance or otherwise, in Infants, while the Roots remain, or by Reason of new Teeth which thrust out the first which are without Root fastned in the holes, but held by only a membranous Substance, in Children about six or seven years of Age, and in Horses and other Creatures, about three, four or five years of age by which we know their Age, is repaired by Nature and others come in their Rooms: but if this chance to people in years, when the Roots are fixed, which are also carried away when the tooth falls or is drawn out, or if any stump remain it is unprofitable, and they cannot grow again. I knew one who is now alive, who is as a rare Example, being a Man, that had two new grinders in the place of teeth that were before plucked out. And although while they are found, the teeth grow as they are worn away: yet when they are rotten and taken out, they will not grow again. Yet this defect, when one or two teeth are wanting, which causeth Deformity if from before, may be supplied with artificiall teeth made of bone, which I have known

known some constantly to wear; and they have not been discoverable from true.

The Cure of Nayls fallen off.

The want of Hair, being a Disease in number deficient, when the Roots are gone cannot be repaired, because it is impossible to restore any part of the Body being quite taken away. Also when the Pores of the Hairs grow together, that defect cannot be cured. Wherefore in a true Baldness, and Scar in the Skin, or when the Pores any waies unite, or in an Alopecia, when the hairs are gone at that Root, to labour to restore them is to wash a black More white.

The Cure of the Beard fallen off.

But in the want of hair, when they are so fallen that none appear, yet if the Roots and Seeds remain, then they may be restored by Art, or grow again of themselves. But if this defect be in magnitude wanting, as we said, when the hair grows no more, as in Eunuchs, or slowly the Pores being little, as in some, this cannot be cured by Art; in others it is difficult to be attempted, though divers things are used, yet the success is slow and not before Nature attempts it of her own accord.

In the Cure of these defects, a prognostick being alwaies presupposed, leaving that which is desparate we must begin the Cure of the rest at the cause which is first to be removed, whether externall or internall if it come from evill Excrements which must be evacuated by purging, or by the habit of the Body; then we must proceed to topicall Medicines to the part fit for the Generation of hair.

If it come from evill Juyce the cause must be purged away, and that which is in the Blood must be clensed, and the evill Concoctions amended, and good Blood be produced for nourishing the wholl Body, and also for the Hair; which purges if they be often and strong, by drawing from the Habit of the body, the cause that corrupts the hair, and the malignant quality in the French Pox, will cure both the falling of Hair and the Disease that causeth it.

Purges are to be administred according to the Excrements that abound: and because these sharp and salt Humors are carried with blood and water by the Veins to the Pores of the Skin, where they destroy the Roots of the hair, let the Purge be proper for these Humors: such as is given against Scabs, Itch, and the ring Worms, in treating whereof we have shewed divers Forms; as when an evill quality in the French Disease, hurteth the hair, you must use the same Purge which is good against that. Evacuation by the Habit of the body, doth more directly throw off that filth which lyeth at the Roots of the hair; and sweating or breathing by insensible transpiration doth it: but first purge, then sweat, principally in the falling of Hair in the Pox which comes from Venom, you must cure it by the habit of the Body, and so you will cure the Pox also as we shall shew hereafter, where we shall prescribe divers Sudorisicks by things taken in, we can hardly produce Hair, although it may be done by some things which throw the Excrements to the Skin and this is the judgement of those who think the hair proceeds from Excrements: and therefore they prescribe such things which may effect that. As Figs which by a proper Faculty do send Excrements to the Skin; they conclude them so from the vulgar Opinion that Figs beget Lice which they say come from filth in the Skin caused by Excrements driven thither by the Figs, when the filth that produceth Lice, comes rather from externall things cleaving to the Skin. The cause of this opinion was; because the seeds of Figs in shape and multitude resemble Lice, and they also crack in the teeth and between the Nayls; others for the driving of Excrements to the Skin to produce hairs give Treacle, by reason of the troches of Vipers which is in it: supposing that Vipers flesh taken into the body, can cast off, as Vipers do their Skins and throw the Excrements to the skin for producing of hair.

It is certain that Treacle by causing sweat, doth rather throw out the Excrements that are about the Skin than bring them thither. And if Vipers flesh can throw off a skin, it will rather drive Excrements from the Body, then lodg them there, as we have shewed in the Cure of Elephantiasis. Lastly, since it is certain as we have shewed at large, that Hair is not nourished of Excrements or Vapors unknown, much less are they made of the same; but they rather fall away by Excrements when they come to the Roots, and they as other cartilaginous Bodies and Nayls are nourished from the Blood with a Juyce proper for them, we cannot perswade our selves that Excrements being driven to the Skin can produce Hair, but contrarywise you may produce Hair better by removing of Excrements and throwing them out of the Body. The chief end in curing fallen hair by the French Disease, is to expel that Venom outwardly by sweat, and so you must do if you will cure any kind of Baldness which comes by congestion of Excrements.

The hair of the Head, Beard, Eye-brows is to be restored by things outwardly applied to the part; such which increase hair by an occult quality as are many things fetcht from living Creatures and known by Experience; or such as be drying and astringent, as most are which are used for this purpose; and the reason is because they dry and make thicker the Juyce that is brought to the Roots of the Hair which makes it a more fit Nourishment for them. Or by such as raise Blisters by drawing the juyce to the Superficies, and apply to the Roots of the hair to nourish the same; of which either single or mixed you may make Medicines for growing of hair.

In the beginning of hairs to fall, to prevent it, and preserve what remains if it be far gone we must mix very strong astringents with the other that the Pores may be closed. And we add stronger dryers and digesters to these, when evill Humors lie about the Roots to destroy the Hairs; some teach that the hair may be preserved from falling in a venemous Disease as the French Pox by using Lenitives as Milk which tempereth the Venenosity. All these Medicines of what kind soever, whether they bring hair again or produce and preserve it, are applyed divers waies, or they are used as washes and Fomentations many made of Plants are diversly applied, as the Root of *Water lilly, Leaves of Beets, and Coleworts, with Salt, the Daffodill Root, with Vinegar, the Dogs tongue leaves with Swins Grease or the like*: and when you will bring Nourishment to the Hair, mix *Onions, Garlick, Squills and Raddishes, or the Root or Leaves of Crowfoot, or Watercresses, or wild Mustard and the like.*

The Pouders of divers Plants are mixed with Honey and Oyls grease, Pitch and Rosin: sometimes to be anointed and sometimes applied Plaisterwise: as the *Bark of Reeds, or Roots of Maiden hair, leaves of Godlylocks, Southernwood, Mirtles, Wormwood, berries of Myrtles, Juniper, and Myrobalans*; and to draw them out, *the pouder of the Roots of Asarabacca, Hellebore, Thapsia, Rue, the seeds of Mustard, Staphsager, Watercresses, Rockets, Rue, Henbane seeds*, with Oyl, of Flower-de-luce, are said to bring hairs on the eye-brows and Chin. Also the ashes of some of the aforesaid Plants calsined do the same being made into the Form of a Liniment, as the ashes of Hazel Nut shells, also *of Southernwood, Maiden-hair, Goldilocks, Reeds barks or Roots: the Barks of Pine-tree, Roots of Daffodill, Sowbread, Garlick, leaves of Myrtle, Wormwood, Mistelroe, Cypress-Nuts, Date-stones and Line-seed, burnt with Straw, also Barley.*

The juyces of Plants either are used alone or mixed as when you will attract, *of Onions, Garlick, Squills, Raddish, Thapsia or of Sowbread.* When you will dry. *The juyce of Reeds, Southernwood, Dockes, Myrtle or Willow-leaves:* and of other Plants aforesaid.

Also Aloes dissolved in Wine is very good. Also the Liquor that comes from the stock of a Lenden-tree being cut, is very good: the Milk of Gumsuccory will fetch hair upon the Eye-brows saith *Dioscorides.*

The water of Honey distilled, especially that which is made

mixe of the comb with the Bees in it, adding, Ants and Hog Lice that are found among stones, is good as also *Aqua vitæ*. The Mucilage which is expressed or strained from the Roots of an Elm which are first boiled is good also: Honey they say also will bring hair especially honey Anacardinum.

Divers Oyls are for the same use, as that which pressed out of Nuts, Almonds, Peaches, or Nut-kernells, or let Nut-kernels be bruised and applied; also old Oyl Olive or lamp Oyl, or rap Oyl, or that which is distilled of Juniper-berries or Spike; or Oyl of Myrtles Roses in which Southernwood or Coloquintida, have been boiled, and also sort of hot Oyls are used by practitioners, To make hairs longer some have privately used Oyl in which the Roots of Oziers and Embick Myrobalans have been boiled of Gums Labdanum is the best dissolved with Honey, or when hair is to be fastned, with oyl of Myrtles or of Roses or with old Wine and juyce of Myrtles to which somtimes Myrrh is added; also Frankincense, Mastich, Sandarach is and other Gums with Rosin, and when we will attract, we add Euphorbium.

Divers things taken from living Creatures are used to bring hair, as Bees with their combs stamped, or the pouder of them or of Waspes; the little Cantharides, which are red and have black spots, and are black bellied which the French call *Gellines de nostre Dame*, and are found upon the stocks of Trees, being dryed, poudered, and mixed with Oyl of Spike are very efficacious. The pouder of the Cantharides in the Shops are attractive but you must mix them with Oyl of Violets or Almonds, least they ulcerate.

Use the Pouder of Lizards their head and tayle taken off, with Oyl of Yolks of Eggs. The dung of a Mouse with Vinegar, and also other dungs are very attractive. The filth that comes from Bee Hives and the pouder of Bees half or wholly burnt are good with Honey and Oyl of Spike, Juniper or Myrtles or the like; or with Grease of a Bear or the like, or with Pitch and Wax, or with Wine and Vinegar; also ashes of Waspes, Cantharides, Grashoppers, Flies, Hog-lice, of Moles, or of their skins of Mice or their heads, of Hares head of Lizards, Froggs, Horse-leeches, of a Sea-horse, or Sea-vrchin, the Hoofes of a Mule, of Goats, of Bears skins, of a Fox, of a Hedghog, of Snaks skins, of Mans hair, of Bears or Hogs bristles, of Mouse or Goats dung.

Grease is commended especially of a Bear, then of a Mole, of a Spike fish, of a Duck, Goose, Hen, Goat, Hog, Coney, Dioscorides Anoynts, with Oesypus or Grease of Wool. They say that Oyl of Worms increaseth hair, also Oyl of Egs, or that in which Lizards have been boiled. The Mucilage which come, from Snails bruised with some Bees and Waspes: and that Water which runs out when Snails are pricked brings hair upon the Eye-brows. The blood of a Sea-turtle a little dried is commended, also the Galls of Hogs, Goats and Bulls: of earthly things. The Froath of the Sea made hard with the Sun, mixed with Vinegar, or the ashes of it; also salt Peter, quick Brimstone, Oyster shell, the pouder of a Grindstone mixed with some sharp Juyces. The Armenian stone or *Lapis Lazuli* beaten applied with some Liquor fit, brings hair upon the Eye-brows. Lead filed and Antimony mixed into pouder and applyed with Grease is good to bring hair upon the Eye-brows, if not, it doth by blackness keep the want of it from being seen, others commend burnt Stibium of compound Applications, to bring hair or to cause a Beard these following are the best: a good Liniment. Take *Oyl of Myrtles, and sweet Almonds, of each one ounce and an half, or the barks of the Roots of Canes or Reeds or of Colworts stock burnt, of Maiden hair or Goldilocks, and of Southernwood burnt each two drams, of the heads of Mice burnt and Bees burnt with their Combs one dram and a half, of Labdanum two drams, of Honey one ounce: make a Liniment.*

Or take *of Oyl wherein Southernwood hath boiled two ounces, of Honey one ounce, of the ashes of Mole skins and Hedghoge one dram, of the ashes of Bees and Waspes half a dram, ashes of Nut shells two scruples, Mice dung one scruple, of Bears Grease one ounce, of Labdanum three drams: mix them for a Liniment.* To which add Gallia moschata for the sent, or Musk or Oyl of Cloves. Or,

Take *of Oyl of Nuts and Bays each one ounce and an half, Oyl of Juniper-berries or Spike half a dram, the juyce of Docks and Southernwood or of Myrtles leaves each one ounce: boyl them a little add one ounce and an half of Honey, pouder of Bees half a dram, of Labdanum half an ounce, of liquid Storax a little:* it will attract more strongly if you add the ashes of *red Cantharides, with black spots half a dram, of the pouder of Cantharides of the shops one scruple.* To draw Nourishment to the hair you may make it thus. Take *of the Juyce of Raddish one ounce, Juyce of Onions half an ounce, of Honey one ounce and an half, Labdanum two drams, Myrrh one dram, Euphorbium half a dram, of the Sea Foame one dram, or instead thereof one dram, of Samon salt or of salt Peeter, of Pitch or Rosin be dissolved in Wine six drams: mix them for a Liniment.*

When the Eye-brows or Beard falleth this is experienced to restore the hair. Take *of Henbane seeds two drams, of Mouse dung one dram, of the pouder of Goldilocks and Nigella seeds each half a dram, of Spikenard half a scruple, of Oyl of Juniper as much as will make an Oyntment:* you may make many Oyntments of the aforesaid Simples for the same use.

To preserve the Hair from falling when you are afraid thereof use this. Take *of Oyl of Myrtles or of Mastich two ounces, of Labdanum and Hypocistis or Acacia dissolved in sharp Wine or Vinegar two drams, of Allum or Salt two drams, of Wax as much as will serve to make an Oyntment*, or; Take *of Oyl of Roses and Quinces each one ounce, of Labdanum dissolved in Verjuyce two ounces, of Mastich one dram and an half, of the pouder of Galls, Cypress Nuts and Myrobalans each one dram: mix them for an Unguent* to these you may add, *the ashes of Filbirds, Nuts, and Bees* and other dryers above mentioned. If you desire hair to grow again or to come forth, we may use Fomentations, with Liniments before and after or alone; and they are made of the Decoction *of Southernwood, Maiden-hair, Goldilocks, Horehound, Vervain, Myrtle leaves, sour Docks, Rosemary flowers, Chamepyts or Groundpine, Rosemary topps, and Sage:* if the Head be to be washed, Take *the Roots of Reeds or bark of an Elme, the herb Ferula* if you can get it, *Linseed, torrefied and Spikenard* according to *Dioscorides*. And if the Hair fall by reason of bad Humors, we must add those things which cleanse them away, *as Sennæ, Guiacum, roots of Briony, Wildgourd, Snakeweed, Spinage, Lupins, Beans, Bran*, boyling them to a Lixivium, or make a Lixivium or Lye *of the ashes of Juniper, Southerwood, Horehound, Nuts, Almonds, Snails*, sometimes adding other ashes as before, and boyling other things aforementioned in the same; sometimes Fomentations are made of stilled Waters, *as of Southernwood, Maiden-hair, Goldenlocks, with distilled Honey*, which you may use with *ashes of Labdanum*. Also *a Water of Lard and Honey* with other proper Plants is good. There is another *of boys urine, Wine and Milk*, distilled in equall parts, to which add *Southernwood, and other proper herbs, and sometimes Mustard seed to make it stronger*. The ashes of Tobacco boyled first in Boys urine do cause hair to grow, and kill Lice wonderfully. The urine of a Cow or Mare in which Fænugreek seed hath been boyled is also used. To prevent the Falling of hair, make more astringent Decoctions *in sharp Wine or Lye, or ironed Water, leaves of Myrtles, and berries of the same, Elme barks, red Roses, Galls, Cypress Nuts*, with other things.

The Falling of hair from the French Pox is cured by a Fomentation of Milk, as we shewed, adding Butter, the Oyl of sweet Almonds and the like Lenients, to attemper the acrimony of the Humor; besides these externall Medicines. That soote which comes from Pine-tree burnt or Frankincense or other Gums especially Storax, which sends a sweet sent, doth cause the growing of hair in the Eye-brows often and hard rubbing of the part while it grows red with the Figg leaves or rough cloaths, helpeth

to

to cause hair by drawing forth the moisture: or rubbing with sharpe Juyces as of Raddishes, Onions, Garlick, Squills and the like. If the down be first shaved off or the thin hairs very often, it helps much to make them thicker and longer. This will cause the nourishing moisture to come to the part, and the hairs come forth better, this is the best way to produce a Beard, and when hair falls it will grow stronger; the smoothness of the Eye-brows is amended if with blacking or Soote, with Oyl of Nuts and vernish you make a paint.

The Cure of the over largeness of the body of magnitude of parts increased, of over-large Orifices.

When the Body or parts thereof grow too big, or the Orifices too large, if they be originall from the Birth, they cannot be cured: nor can we cut off any thing from a part too large or sew up large Orifices, or conglutinate them, for then they would loose their use, which is of more concernment then Deformity. Yet for to astring some Orifices if they be not too wide by Nature, but caused by Force without Rupture, Women have some Medicines for the externall Orifice of the womb, to make them conceive the better, and to conceal the loss of Virginity, by often applying astringents which make the parts straighter. A Fomentation or Incession is used for this purpose made of the Decoction *of Galls, and Pomegranate peels in Rain or Smith's Water, with red Wine, Vinegar, and Alum:* sometimes they add *Comfrey roots, leaves of Sumach, Plantane, Oak, Cypress Nuts, Pine barks* and other astringents and sweet scented as Cypress, writing Inke applyed with clouts doth strongly astring or this following. Take *of Pomegranate flowers half an ounce, Mastich or Frankincense and Dragons blood each two drams, of Asphaltum or Mummy Arabick in red Wine and Juyce of unripe Pears or Sloes make a past and apply it, or sprinkle on the powder of Bole, Galls and Mastich,* to which add *Antimony and Scales of Iron.* To strengthen the Privities, and help Conception this water is most proper: Take *of the great Comfrey roots, Galbanum, Roman Vitriol, Pine-gum, Ammoniacum, sweet Almonds, Cypress Nuts, grains of Sumach, Terra sigillata each equall parts,: powder them and mix them with Sloe-water, boyl them a little, and with water being warm foment the Privities with a linnen cloath.* This following is of the same if not greater Vertue. Take *of the leaves of Myrtles, Swine-cresses each four handfulls, of green Medlars, Sloes and Pears each two pugils and an half, of Hens Gizards thirty, distill them in Balneo mariæ, and let the Water be put into the Privities with a lock of Wool often.* If the Nayls grow continually thick it cannot be cured, for if you shave some from them the next will be as thick.

The Cure of the mouth of the Womb being too large.

The Cure of Nayls that are too thick or too long

But when the Nails are too long, although it be Naturall, in regard they bring Deformity and hinder, they must be cut to the quick, so that they be even with the flesh for to cure long hair. This is done by trimming according to the custome of the Country: but when they grow too long in a place they should not as in the Forehead, or in the upper Lip of a Woman which is usuall or upon her Chin which is monstrous; or when they are too many in the Privities, then they must be taken and prevented from returning which is most difficult; but it is to be done by outward applications a preparative going before; either by pulling forth, or cutting them off or burning the skin, when there is a Plethory you must prepare by letting blood, if you intend to burn them off, to prevent Inflamation and pain: you must also purge. Some use sweating before either in a dry Bath or with hot Water, that the Pores being opened the Medicines applyed may have the better Operation. But this is not so necessary because it will be done without; but they do well after to cleanse the skin from the Liniments and filth especially when they stick fast in the Privities: Topiks are divers, to make the skin clean from hair called *Psilothra*; this they do by a caustick Power by burning, and if they burn strong as we said of hot water the Roots will be taken off and a Scar will be in the Skin, so that they never will grow again. This is to be done warily and if the place be burnt, cured as a burn. Some Medicines work otherwise then by caustick or burning, by a secret propriety; which are mixed with causticks to keep hairs from returning: besides these there are some which have an astringent Faculty by which they hinder hair which do drive back the Nourishment. And cheifly to keep hair from growing again, they use Narcoticks or Stupefactives, supposing that they repel them by their great coldness, but they being not cold must do it by another way of Digestion, which we have shewed to be their property, or they are used to take away the pain by Causticks, so they were used, mixed with other things at first, and after they were supposed to be applied for the hindering of that groweth of hair. These Medicines which take of Hair or hinder it from growing, either by way of Oyntment or Pouder are made of the Simples following. First from Plants, as the Roots of Osmund-royall, of Cypress, take off hair according to *Dioscorides*: the Meal of Lupins with Oyl and Vinegar: the red Berries of Briony take away hair, hence the Plant is called a *Psilothron*, to which you must add Vinegar when they are bruised, least they cause Ulceration. The juyce of Spurge doth it excellently, but it inflameth easily, therefore it must be mixed with the white of an Egg or Oyl: the Juyce of the wild Cowcumber doth the like: other Juyces keep them from growing as of Fumitory, Coleworts, especially Narcoticks, as of Henbane, Hemlock and Poppies. The distilled Water of the same doth the like, as also the Water of Stonecrop and Housleek: the water that drops from a Vine that is burnt is good also: also Gum of Ivy dissolved in any proper Water is much commended.

From living Creatures these are good the sea Hare and the Urtica, beaten and laid on saith *Dioscorides*. Also Ants beaten together with their Eggs are commended if applied. Also Ants Eggs with the Milk of a Bitch or meal of Lupins with strong Vinegar, Moles, green Froggs and Horsleeches poudered, or burned, and applied with Oyl or Grease are also good: also Salamanders and Glow-worms mixed and beat together with Ants Eggs are of much force: also Swallows Dung and Vinegar: also Barts blood, Frogs blood, Snails with Vinegar, Moles with Vitrioll, Birchs Milk, Ox Gall, black Chickens and Dogs piss. The Decoction of a Mole with salt Water, till the water be almost gone, takes away hair but brings white in their stead.

Dioscorides commends the Oyl wherein a Salamander of the Sea hath been boiled. They say Salt often thrown upon the Head takes away hair; and the crocus of Iron with Oyl. Of Compounds this following is the best. Take *of quick Lime one ounce, of Orpment one dram or one dram and an half,* add a little of the white of an Egg and Barbers Sudds anoint the place with your Finger, and a quarter of an hour after wash it with the Sudds, if they go not off, increase the quantity of Orpment, and so continue till you have done it; some mix these with French Soape. The Turks have a thing called *Rusma*, it comes out of the Earth and is like skales of Iron, but lighter, black and as it were burnt, which is best of all, and the Women use it much as *Bellonius* saith, because it makes the parts smooth without burning, leaving no sign of hair; they take the half of this Pouder & half of the Pouder of quick Lime, and steep them in Water and wash therewith, and afterwards in the Bath they wipe the part and the Hairs comes off. This *Rusma* is a kind of Shoemakers black or vitrioll called *Sory* or *Melanteria*, it is like it by Description: other things to take off hair are made thus. Take *of unsleked Lime one ounce, of Orpiment half a dram: pouder them and boyl them in water or Lie, then use it: others use the ashes of Harts-horn with as much Orpiment boyled in Rain-water: the Pouder of Orpiment mixed with*

with juyce of Henbane takes off hair and they will not grow again, and the Juyce is to prevent pain. Another; Take *of Orpiment one dram, of Gum, of Ivy five drams, of Nuts Eggs bruised one spoonefull and mix them with Vinegar*; you may add *the blood of a Bat or of Frogs, or Juyce of Henbane*, least they should grow again; some use the Decoction *of Spurge in Vinegar with Quick-lime, and least they should excoriat they boyl Mallows therewith or add Milk.* This water takes off Hair and keeps it from growing again; Take *of salt Petter eight ounces, of Allum six ounces: beat them together and distill a water with which wash the part, and when it is dry wash it again. A Lye in which Nettle roots have been boyled, and a rusty Horse-shoe steeped doth the same, if after the part be shaved you wash the place there with thrice every day.* To hinder their growing again this is the chief Medicine. Take *of the Juyce of the Narcotick herb afore mentioned two ounces, of the blood of a Bat half an ounce and add thereto Gum of Ivy, or half an ounce of the Mucilage, of Fleabane, or of pouder of Ceruse and burnt Lead each one dram.* or; Take *of Opium half an ounce, of Sanguis Draconis one ounce and an half: boyl them in Vinegar, adding the Juyce of Henbane, a distilled Water of Henbane, Poppy, Hemlock, Houseleek, and Stonecrop with the bloods afore mentioned and Allum and Vinegar is approved.* Hair cannot be pulled off, otherwise many together would cause pain, and one by one require much time; therefore a very sticking Plaister laid some time upon the part, and drawn off, will do it; for this purpose. Take *of the Rosin of the Fir-tree or of the Larix-tree four spoonefulls, of Mastich pondered as much as a small Nut; dissolve and boyl them a little, alwaies stirring them, and then powre them into cold water and make a Plaister.*

It is otherwise made *with Colophony and a little Gum Ammoniack or Galbanum*, for so the Skin being mollified and enlarged the hairs come forth more easily.

If you add something which will pull hairs forth it will work both actually and potentially as Gum of Ivy or thus,

Take *of Pitch half an ounce, of Mastich or Gum of Ivy three drams, of Orpiment one dram and an half: with Rosin make a Plaister.*

You may take hairs off with Scissors, but better with a Rayser, first washing with warm Sudds, but then the Roots will appear, and arise suddenly again, and the oftner you shave, the thicker they will grow; therefore shaving will but palliate and not take away this Deformity.

The skin must be a little seared, not to take away the hairs, because they may better be cut away, but to hinder their growth, for so the Roots will be consumed, and the Pores stopped: which as we may do it with Medicines so may we with an actuall Cautery; and this is done with a Plate of Gold burning hot suddenly clapt on, for so though there be a burn, yet after the healing thereof no Scar will remain.

The Cure of the carnosity and fatness of the Body and parts thereof.

It is better to prevent then take away grosness of Body which is burdensome, because a Body that hath been great when made less will be wrinkled, uneven and deformed; as the Breasts when fallen are lank and flaggy, so the Cheeks. Calses of the Leggs and Belly, if formerly distended, will wrinkle when they are fallen.

But to prevent this burdensome flesh, or to stop it that it proceed no further, we must hinder the increase of that fat which is Naturall in the Blood: first by a more spare Diet, or such as nourish little. But if a more sparing Diet only be used then formerly and it be of good Juyce, there will be rather an increase of better Blood, then a less quantity, which will little avail for abating of flesh. And though a sparing Diet doth abate, in regard men will not long endure it, we shall do little by that means. But if we prescribe a Diet of little Nourishment of Herbs rather then flesh, and water instead of Wine or very thin Wine or other Drink, they shall so grow lean, and this is the best way: great and constant Labour taketh down the flesh and Fat of the Body in time, especially if the Diet afore mentioned be used; but ordnary Exercise makes a better Concoction, and rather increaseth then diminisheth the Flesh.

Great and often Evacuations by which the Blood and nourishing Juyce is taken away from the parts and their increase or groweth hindered, as great Sweats by strong Exercise, or Baths or the like are very proper as Bloodletting and Cupping which Scarification and often Purging; which as they are prescribed with good advise, so by chance when there is a Flux of blood, or of Seed by much Venery, or of the Belly, or an acute Disease, corpulency is taken away and the Body made lean. And this will be so also by old Age.

It may also be done by altering Medicines which keep the Body hot and dry constantly, this way will prevent and diminish Corpulency, and the constitution may be thus altered by Diet as well as Medicines, Decoctions are cheifly commended for abating corpulency, *as of the Huskes of Filberds boyled in Wine, Roots of Polypody, Avens, wild Chervill: Rosemary with a little Ginger.*

Or the distilled Water of these often drunk.

Also Vinegar often drunk doth the same thing.

Pouders made of these things following and taken in Wine are said to do the same, *as the seeds of Asb, Hil-wort or Pol-montane, Parsley.*

Also Tartar or Wine-leaves often taken, or Gum Sandarach half a dram, with Oxymel, also the Salt of Vipers.

It is said that *Pepper* often used will cause Leanness.

Pills of bitter things taken every morning half a scruple are good, as of Birthwort Roots, Gentian each one dram, of Madder roots, and tops of the lesser Centaury each half a dram, of Allum one scruple, with Juyce of Polypody or Avens make a mass.

The Cure of too great Breasts.

Women which desire to be handsom labour much to hinder their Breasts from being over large, they affect to have them little for Ornament, and fear they will be unhandsome when they are big.

This is done not only by using such means as extenuate the whol Body (which we have declared) but by outward Applications: which by repelling, cooling and binding, or consuming the Nourishment by a digesting and drying Quality, keep the breasts comely.

The same Medicines which we spake of in the Chapter of Milk over flowing, which hinder the coming of it to the brests, or dissolve that which is there, being applied to the breasts will also make them less.

A Fomentation often repeated with a Sponge or Linnen clout, and left at the Breasts till dry will do it. This is made *of red Wine, Vinegar, Ladies mantle, Herstail, Myrtles, Plantane, Roses, Balm, Mints, Galls, and other astringents.*

Or make it *of Sal ammoniack and Allum boyled in Wine.*

Stilled Water from the foresaid may be also used with Allum; also a Water distilled of green Pine-nuts: also that which is made by Distillation of Eggs, Allum, and Pouder of Chalk.

Quinces, Apples, green Pears, Medlars, Service-berries, Sloes beaten together with Vinegar, or boyled in it do the same; or boyled with Oyl of green Olives and Galls.

Hemlock fresh gathered beaten by it self or with Vinegar, Henbane leaves, Mints and Balm do the same.

This Plaister following is also good. Take *of Mastick and Frankincense each half an ounce, of Galls and Cypress nuts each two drams, of Bole or Fullers Earth or red Okar three drams: pouder them and mix them with the white of an Egg and Vinegar or Honey and so apply them.* or,

Take *of Pomegranate peels three drams, of Acacia hypocistis or Conserve of Sloes half an ounce: mix them with Vinegar and the Mucilage of Fleabane seed.*

Or this Oynment. Take *of Ceruse three drams, of Alabaster or white Wax two drams, of Camphir one dram, of Borax half a dram, of the Infusion of Gum dragant half an ounce, of Oyl of Myrtles as much as will make an Oynment.*

They commend the Pouder of two Whetstones rubbed together mixed with Vinegar, *Dioscorides* saith that the Cyprus Whetstone called *Naxia*, keeps Breasts from growing a Squate or skale Fish laid to the breasts doth the same by astriction.

When

When the Body or any part is too small by Nature, it cannot be cured, nor a Member restored by an artificiall Instrument, or by making the like, this is a Disease in number deficient; but that which is deficient in magnitude may be supplyed in some.

The Cure of a small Body or small Limbs, and of such parts are lame.

When any part of a Member is lost, instead thereof new flesh may be added, which may be fashioned like unto the former; which divers ingenious Chirurgions say they can do when part of the Nose is taken off: first they take away the skin in the extream part of the Nose, then they make a wound in the musculous part of the Arm of the Patient, into which they place the remaining part of his Nose having the skin cut off as aforesaid: first putting a Tent in each Nostril, then they bind his Head to his Arm, and so let it remain till the flesh groweth to the Nose, this done they cut off as much of the Arm as is fit to make a Nose, and fashion it like the former and then take the Tents out of the Nostril, and after heal it up. If this may be done by a Nose, why not by other Members, and though this new flesh should serve for no use, yet it would take away Deformity.

The Cure of breasts consumed.

To make new Breasts and Papps so that the Child may suck: women use to apply an Acorn cup or half a Nut shell filled with Rosin of the Larix tree: to the place where the Niple is wanting and let it stay on some time.

The Cure of Gums consumed.

The Gums being naked as it were without a thick Skin, being worn away may be restored. This is done first by taking away any thing that is rotten about them, then rubbing them often with Vinegar of Squils, or Oyl and Honey which is stronger, with the pouder of Dragon roots and Honey or with Ægyptiacum and Wine, and the like clensers and resisters of putrifaction mentioned in the Ulcers of the Mouth.

Afterwards let them often rub the Gums with drying things that breed flesh and glew the same to the Teeth, as with this Pouder. Take *of Orris Root one dram, of the Meale of Oroby two drams, of Frankincense or mastich one dram, of Sarcocol half a dram, of burnt Allum one scruple, of Angelica Roots for to give a Sent or Cipress roots as* Dioscorides *will have or Cloves, or of Mosch or Ambergreese a little, so make a Pouder.*

Birthwort roots may well be added, but they are bitter, and Mirrhe but it is unpleasant, therefore instead thereof: Take *Benzoin or Storax, Sanguis Draconis is good to be mixed therewith and also Blood stone.*

The ashes of Pennyroyal are good according to Dioscorides, *burnt Harts horn or Ivory* and things aforesaid which fix Teeth, especially when they are loose by reason of the consuming of the Gums: there are also things to rub the teeth mentioned in the Rottenness of teeth, that are good.

Calcine Frankincense and Mastich, and mix them with Honey, a little pouder of Coral with Salt and Allum, and rub therewith.

The Troches made of Orobus and Honey are used.

The Pouders may be made up with Honey or Oxymel of Squills into Troches, and so dryed and kept for use.

The Cure of straight Orifices.

The straitness of Orifices as of the Womb and Præpuce or Foreskin if it be such, as doth not only bring Deformity; but hinder Action, is to be dilated by incision. This may be done safely in a Phimosis by cutting off the Foreskin which is usuall in Circumcision.

The Cure of Phimosis.

When the womb is too narrow, a division made by Infection hath been often practised, though it be more painfull and difficult then the other.

Therefore first you must begin with the safer way of practise, by fomenting the part with things that loosen mollsten and mollifie, as Fomentations and Baths, Oyntments or Pessaries such as are prescribed in the hardness of the womb; which while you use you must put in a Tent somwhat large made of a dry Gentian root or a Sponge tyed close together, that as it swells it may enlarge the Orifice, by often use.

The Cure of the Leanness of the Body and its parts.

That Leanness which is not by a Consumption but Naturall; is seldom altered. Otherwise flesh or fat may be caused by things that increase blood and nourishing Juyce; as good Diet and rest, Natural Evacuations, Motions of Body and Mind; these will bring a better Habit to the Body.

The Cure of lank and loose Breasts.

When Breasts are lank and hang down, they are unseemly, and women that love to be neate, desire their Cure; this is done by applying things that make them harder and firmer, such astringent and drying things which we said would hinder the growth of Breasts.

The Cure of the uncomely Figure of parts.

When parts are disproportioned and cause Deformity, besides what is from number or magnitude, of which we have spoken, as a Head, Nose or Mouth imshapen, if they be so Naturally, they are incurable as also the Teeth and Nayls.

The Cure of over curling Hair.

If the Hair be too curling and much, we cut it off, if little pluck it out; but this being not very unseemly is not to be tampered with, except it be troublesome, as when in the Eye-brows and from thence they bend into the Eyes.

These hairs are to be rectified by often touching them with the slime of a Snaile, or with Glew.

They say they will grow again when pulled out if the Pores be anointed with Oyl in which a Lizard hath been boiled; or with Frogs blood, especially if it be mixed with the pouder of Laurel root or the ashes of Organ.

Things that cause Hair to curle.

Some desire their Hair may curle, and this is done by the use of strong astringents such as were mentioned among those which black the hair, *as the Decoction of Galls, Pomegranate peels, Cypress Nuts, Pomegranate flowers and the like made into a Lixinium,* to which they ad things that cause curling *as Daffodill roots, and Dwarfe Elder roots and Leaves with the seed of Henbane.*

Also Oyntments made of the same are used, as: Take *of Oyl of Myrtles and Mastich two ounces, Oyl of Henbane half an ounce, Juyce of Myrtles and Vinegar each one ounce: boyl them, then add the ashes of Chestnuts, Hedghog and Pine nuts each half a dram, the shavings of Rams horns, Gum Arabick and Dragonth each one dram, Myrrh half a dram, Honey as much as will make an Oyntment.*

They say Mucilages boyled in Water or Lye will do the same, if made of Marsh-mallows roots, Linseed, Fænugreek and Fleabane seed, and Gum Arabick, this they beleeve will so soften the hair that they will be fitter to curle or the Pores being loosned thereby and made larger, the hairs will come forth more crooked. Others add *Fern-roots, Beets and Lythargy,* and when the hairs are dry anoint with Oyl of Myrtles. Some anoint with the Roots of Dwarf Elder mixed with Oyl. Women do more certainly with crisping Irons; and when they go to Bed, they twist them, and with great pains put them under their Head geare, and in the morning being combed out, they continue curled the whol day.

The Cure of the separation of parts which should be united as of the hare Lip.

If there be a Division of any part which should be united whether after the Cure of some wound, or Naturall, if it be in a fleshy part it may be united; as that of the upper Lip which Children are born with called a hare Lip in Dutch *Hasenschare,* it will be united if it be cut on both sides, and after the Lips be joyned together with Needles wrap about with Silk or with sowing and a Plaister laid

over

over till it be cured; this you may try in any other part where there is Deformity or Hindrance, and in fleshy parts it will be done, but scarsely in other parts. Also these may be artificially united, if you first take of the skin upon each side, and apply sticking Plaisters to the sides with double or treble Clouts and Buttons, with which and good Ligature, the parts divided will be drawn together and united.

The Cure of Gums separated from the Teeth.

If the Gums be separated from the Teeth by biting hard things, you must chew upon the sound side; if from gravel upon the Teeth called *Tophi*, they must first be taken off, otherwise flesh will not grow but being taken off the flesh will grow at the Roots of the teeth, and so be united unto them. Therefore the Remedies are such as clense, of which we spoke in the Foulness of teeth, and of things that breed flesh in the consumption of the Gums, for it is done by clensing, breeding flesh and drying which causeth Glutination.

Mouth waters which dry and astring are good as: Take *of Comfrey roots, five leaved Grass, Orris each one ounce, of Birthwort and Althea each half an ounce, of Angelica and Cypress roots each two drams, of Burnet, Vervain, St. Johnswort, Pennyroyall each one handfull, of red Roses one pugil, Pomegranate flowers two drams, yellow Myrobalans three drams, Oroby seeds two drams, Mastich and Frankincense each one ounce: boyl them in Wine and Honey adding a little Vinegar of Squills and Cinnamon,* let him wash his Mouth often therewith, you may also add a little Allum.

The Cure of broken hollow and rotten Teeth.

When teeth are broken or divided or hollow and rotten, they cannot be repaired, and therefore if they offend must be pulled out; but if they be usefull in regard the next Teeth are gone you may keep them provided that you prevent farther Corruption.

This is done by washing the Mouth often with the Decoction *of Capar leaves, the leaved Grass, Birthwort, Cypress, Leaves of Mints, Galls, Nigella seeds, Bay berries, made in Wine and Vinegar, or with Smiths water.*

The Decoction of Spurge root in Vinegar is the best, and if Allum be added it is the stronger.

Or let him wash his Mouth with Sage or Rosemary Water mixed with Salt and Wine.

Or with Vinegar of Squills if it be not strong enough.

Rub the corrupt Teeth with the things mentioned, for clensing in that Chapter, which by drying take away Corruption or this Pouder. Take *of Cuttle-bone two drams, burnt Coral and Harts horn each one dram, Mastich and Allum each half a dram: make a Pouder.*

Or with the ashes of Organ, Rosemary and Pellitory of the wall mixed with Honey and Salt.

We put into a hollow Tooth the pouder *of Galls roots, of Sulphur-wort, Staphisager, Penny-royall and sometimes Rosin.*

To take away Teeth when unserviceable, the Cyhurgions use Paces and the like Instruments among which that like a Goats hoof is best: some are so active that the standers by, think they do it without Labour, and they are wondered at, and go about deceiving the people with expectation of far greater things which they profess; some cannot be drawn out as easie as those that are loose, especially when they are broken or rotten.

This may be done by Burning for so the Roots become dry, or the Teeth broken, so that they may easily be taken out. And this is done by an actuall Cautery or potential, or *Aqua fortis* or Milk of Spurge, Sory, as in the pain of the Teeth is mentioned: *Dioscorides* saith that the Root of Ranunculus, or Juyce of Sowbread doth the same.

And other things though they are not caustick as the *Root of the black Chamæleon, the Juyce of Celandine, the Lyes of Oyl, the Liquor of that comes out of the Cedar, and the prickle of a Forkefish.*

They suppose that a Tooth will fall out, if you put *Gum of Ivy into it, the fat of a green Frog or of a Cockow, or with the blood of a Lizard.*

If you defend the other teeth with Leaven or wax and apply to the hollow Tooth, the pouder of the root of a *Mulberry tree* which hath been first infused in Vinegar it will fall out.

Also the Root and Leaves of *black Henbane*, laid hot to the Teeth.

Also *wild Coloquintida* infused in Vinegar then poudered and boyled with Honey. or,

Take *the grease of Froggs, Juyce of Celandine, and Aqua vitæ in equall parts, and apply it.*

Or the Juyce of Celandine and Mugwort with Vinegar.

The Colewort worm applyed doth the same, and the water of Sal Ammoniack.

The teeth will fall out if rubbed with the pouder of *Nettle seed* and *Galbanum* equall portions.

The Roughness and clefts of the Nayls.

Though the ruggedness and clefts of the Nayls cannot be made even and smooth, yet as they grow they may vanish, which that it may be better done, and the like not succeed, first use gentle means.

As *Pitch, Wax, Rosin* melted and applyed, also *Mastick, Colophony, and Turpentine* dissolved, adding sometimes *Sulphur or Brimstone.*

Also *Raisons by themselves or with Opoponax.*

Dioscorides commends *Dock roots in Vinegar, and the lesser Celandine and Cypress.*

Also *Watercresses and Linseed* are approved.

To which add *Cummin, Costus roots*, with *Honey* and the *Pulp of Raisons* or *Grease, sometimes Allum and Salt.*

The stronger Medicines are the *Roots of Crowfoot.*

Arsnick with Birdlime, or Gum Serapine, or Wax or Suet or Oyl.

Or *Cantharides with Oyl of Roses, or the like.*

The cleaving of the Hair.

If the hair be not all cleft it is usually neglected, but to cure, you must pluck away that thin part and anoint the ends of the remaining Hairs with the Gall of a Beast: and then use a Decoction to cause Hair, *of Southernwood, Capillar herbes and Cane roots*, and others aforementioned.

They spend time in vain who joyne them together with *Mucilage, or Birdlime or Glue.*

The Cure of Dandrough.

When the Dandrough falls not but with Rubbing it is neglected, or it falls away with only combing, rubbing and washing with Soap; But when it abounds and falls continually upon the cloaths, as when it is to be seen in the Beard then it must be cured; first by purging, if it comes from Excrements, or the Disease cured that causeth it.

The Topick Medicines are to be such as consume and clense filth which causeth it, and they must be strong or weak as it is fixed, alwaies mixed with Lenitives, least they exasparate the Skin too much.

Washings are divers, first common Lye or Barbars Sudds with Soap and Rubbing.

Or Sudds with Juyce of Beets and a little Vinegar; also Honey and a little Gall of a Beast.

Or Urine, or salt Water, or Wine alone, or with the things mentioned.

Washing with hot water, will asswage the smarting of the Skin after the use of clensers; if afterwards you wash with water in which Mallows and Fenugreek have been boiled.

The Decoction of Willow leaves, and bark is commended.

Or the Decoction *of white Spinage, Coleworts and Roots or of Mallows, Pellitory of the wall, Sopewort, Lupines, Beanes, Fenugreek, Melons, and berries of the Spindle tree, also Roots of wild Cowcumbers and Squills.*

Divers Oyntments are used, as this. Take *of the Oyl of bitter Almonds or Nuts two ounces, of Oyl of Violets, Flowerde-luce or Wall flower each one ounce, the juyce of Spinage two ounces and an half, Vinegar as half an ounce: boyl them a little and add the gall of an Ox three drams, Brimstone two drams, Vitriol one dram, Niter half a dram, make a Liniment, which will be stronger with half a dram of Coloquintida.* or,

Take *Almonds and Nuts rosted as a fire each one ounce and an*

half

half: beat them into a paſt, or the Meal of Lupines and Fænugreek with half an ounce of the Powder of Brimſtone, of Bole or other fat Earth two drams, of Dreggs of Wine one dram, Ox gall one ounce, as much common Honey, or Honey of Squills as will make a Liniment: you may add one dram of Muſtard ſeed or Staviſacre.

The *aſhes of Lilly-roots or of Garlick with Honey.*

The *Powder of yellow Myrobalans, with Juyce of Spinage and Vinegar.*

The white and yolk of an Egg pow edup on the Head after waſhed, doth qualifie well after the uſe of ſharp cleanſing things.

Pomatum keeps the skin from chopping.

A good Water is made *of the Tops of St. Johns-wort, Groundpine, Pellitory, or Soap-wort each one handfull and an half, the Meal of Lupines and Fænugreek each one ounce, Brimſtone, ſix drams, Tartar three drams, Niter one dram, red Wine one pint, Vinegar two ounces, Roſe-water one ounce.*

Rub the Head with *Salt, Niter or the Meal of Lupines.*

By combing Dandrough will fall.

The cure of the ſcales in the Hands.

The Scales in the Palmes of the Hands called *Palatella*, in French, is cured as Dandrough with Cleanſers and Emollients.

The Cure of parts to be divided and Orifices that are cloſed when they ſhould be open.

The growing together of parts which ſhould be aſſunder or of Orifices which ſhould be open coming by Birth or chance, cannot be but by force. Therefore if they hinder not actions, let them alone with a little Deformity: but if they hinder the Functions as cloſing of the Anus, womb, and the like, then Section muſt be uſed, or Cautery, by reaſon of the Neceſſity: and this is eaſier done, if there be only a concreſſion by a Membrane interpoſed or Fleſh not thick.

A ſhutting only of the Orifices without growing together of them as of the Mouth in a Convulſion of the Mouth, which hinders actions, we have ſhewed how it ſhould be opened formerly.

The Cure of matted hair.

Another Conjunction is leſs ſeemly and that's in the folding of the Hair is cured with combing: if they bring only Deformity, and no impediment ought to be omitted, becauſe it is not eaſily diſcerned, and if cut off, they will come ſo again: and they who have ſuch matted hair, take little pains therewith, but think them an Ornament and Sign of Manhood.

The Cure of Scituation of parts diſordered.

The Deformity which is in perverting of the Scituation or poſition of the Body, if it hinder the Function or be painfull as in Luxations, Fractures and Ruptures. We ſpoke of their cure before, as alſo of Crookedneſs, which deformeth moſt of all.

When the Toes are awry, ſince it cometh from the ſhoes as we have ſhewed, firſt they muſt not be too ſtraight, and that will prevent that Deformity which can after ſcarce be cured.

The Cure of Gogle Eyes.

The ſtarting forth of the Eyes too far if from the Birth is incurable: but when it comes from a ſtrain, when that ceaſeth they return, ſo that they need no aſtringents; for if they ſhould be aſtringed gently they could not be put back; if ſtrongly they would more hurt the Eyes by wrinkling them. And ſince neither wind nor any Moiſture by filling the inward parts of the Eyes can thruſt them forth, we ſhall in vain apply Topicks as ſome do to conſume wind and water.

The cure of looſe Teeth.

To cure the poſition of the Teeth altered by motion, and fix them again in their places, and to prevent their falling forth, we muſt uſe Dryers and Aſtringents; ſuch as do not black the teeth as ſome do, and add things that have a grateſull ſcent.

Waſhes for the Mouth in this caſe, are made of *Roots of five Leaved graſs, Snakeweed, Capars, Moulin, Myrtle leaves and Maſtich tree and Olive leaves, Bindweed, wild Tanſie, Strawberry leaves, Medlars, Cornil tree Service, and Roſe leaves, Pomegranate flowers, Galls*, theſe black the Teeth, *Elm barks, Acorn cupps, Spunge, Mary Thiſtle, Moſs growing upon trees boyled in Rain water, Iron water, red Wine and Vinegar.*

If *Allum* be added the Decoction will be ſtronger.

To take away the Moiſture which is common there, you may boyl with the reſt *the Roots of Pellitory of Spain, and make a good ſent, Angelica roots, Topps of Roſemary and Sage and ſome Spices.* Some boil Gums therein from whence there is but little aſtriction, as *Maſtick* and the like.

Other waſhings are made *of Allum, Vinegar and Honey.*

Dioſcorides commends the *Pickle of Olives, and Sory.*

Alſo *Waters of Roſes, Horſe tayle and Vinegar* are good to waſh the Mouth.

Some things being chewed do the ſame *as Elicampane, and Berries of bloody Rod, and Barberries alſo Maſtich chewed.*

Dioſcorides teacheth that the Oyl of the wild Olive tree kept in the Mouth fixeth the Teeth.

Pouders are made to rub the Teeth and Gums, for the ſame purpoſe, as of Coral and other dryers, which we deſcribed in the whiting of teeth, adding Salt or Allum, which being burnt doth more aſtring, ſometimes they add the *aſhes of burnt Roſemary, Sage, Myrtles, Maſtich tree, Olive-tree, alſo of Dates ſtones and Cray fiſh or other aſtringent Pouders as of Cypreſs roots, Nuts, Sponge, Mary Thiſtle, Roſes, Hypociſtis acacia, or of Sloes and Maſtick, Bole or any fat earth alſo Spices as Cinnamon, Cloves and Lignum, Aloes.*

The Cure of looſe Nayls.

When looſe Nayls cannot be faſtned, the Deformity from thence is cured as if they were quite fallen off; eſpecially when other grow under: For if they be not and thoſe places be not left bare, a worſe Deformity a riſeth. That therefore looſe Nayls may fall from the skin there is no other Art to be uſed, becauſe they will fall off, *Dioſcorides* teacheth to apply a raiſon thereunto.

CHAP. II.

Of Diſcoloration.

WE call that the diſcolouring of the Body, when it hath another Colour in the Skin, Eyes and Teeth, Hairs and Nayls.

The diſcolouring of the Skin, which appears only where it is naked and hairleſs, is either generall of the whol body, or particular of ſome places only.

A generall Diſcolouring of the skin is, when it hath all over, and not in one place only, a different Colour from the Native, when it is more or leſs red or white; as when it looſeth its freſh Colour, and contracteth another or becomes uncomely in an evill Habit, Jaundies, Palneſs, Rednes and Blackneſs.

Cachexy or evill Habit.

An evill Habit is a Diſcolouration in which the flouriſhing Colour of the Skin being loſt, the decent Habit of the body called *Euexia* is changed into an evill Habit called *Cachexia*: in this the skin is too white and pale, or turnes from white to bleiſh, inclining to the lead Colour, and the ſuperficies of the body appears full and more ſwollen. This Diſeaſe is accompanied with a ſhortneſs of breathing, which troubleth them when they exerciſe or go up anyſteep place, with beating of the Arteries about the Throat and ſides of the Neck, beating of the Heart and Faintneſs, eſpecially in the Feet, and firſt there is a pricking pain at the Heart, of which they complain much. This Diſeaſe though it be incident to all, yet is it moſt common to Virgins, eſpecially at that time when their termes ſhould begin, and it begings then and continues after many Months and ſometimes years, while the Terms are ſtopped, or if they

who have their terms, have also this Disease, they are stopped. Also a lingring Feaver as we said in Feavers is joyned herewith, sometimes other Diseases come upon it, as of the Stomake, Liver, Spleen, and the Urine except changed by some other Disease accompanying it, is white, waterish and crude. And if it last long, the Body will grow bigger and a Leucophlegmatia will follow, as shall be declared.

An evill Habit is the beginning of a Dropsie.

There is another kind of Cachexy, which with Palness of Body and other accidents mentioned, hath swelling of Feet, which if it continue long, the belly also swells and is extended; and this goes before the Dropsie Ascites, and is the beginning thereof, as shall be shewed in the Dropsie.

Evill Nourishments, or Cachochymia is a kind of Cachexy.

There is a third Kind in which the Palness of the Body is not simple, but inclines to an evill Colour as yellow, green, black, yet is not full coloured in the Jaundies, it sheweth it self with a pressing Pain at the Heart, and beating of the Arteries, and other Symptoms as before. This they call Cacochymia or evill Nourishment, from the cause. This is turned into a Jaundies or some kind of Dropsie.

Cachexy with a Dropsie or want of Nourishment.

One of these Kinds is when there are not only uncomely Colours and other Symptomes, but the Habit of body rather decreaseth than increaseth, and the Body groweth lean and thin, and therefore it is called evill habited, if this continue long and the body consume, it is turned to an Atrophy, which is so called from the Cause, as shall be shewed in the Diseases of the Body diminished.

Jaundies.

The Jaundies is a Discolouration in which the skin is dyed of another Colour; this Name comes from the Bird *Ikterus*, by the look of which this Disease was thought to be cured, it is otherwise called *Arcuatus*, because the Colour of the Rain-bow is in the Eyes, and the kingly Disease, either because it is usually with great Men, by reason of their Intemperance, or because it was cured with Meade, which was in time past the Kingly Drink.

Arcuatus.

This Disease is divers according to the diversity of Colours, sometimes it is yellow and called the yellow Jaundies, by the Germans *Geibsuchs*, sometimes it is more Saffron like and full coloured, sometimes it shines and then it is called *Aurigo* from the colour of Gold: some time it is greenish, sometimes black, which prevails over the yellow, and then it is called the black Jaundies. These colours appear first in the Eyes, then in the Face, sometimes they are over most parts of the Body, or over all, sometimes the Urine is of the same Colour, and they seem sometimes Saffron colour'd sometimes black, so that they will discolour a linnen cloath, in the mean time their Excrements which ought to be coloured, are white or ash coloured, and therefore do not provoke the Patient to void them. This Disease sometimes begins of its self, and the colour first grows bright or shining, with pressing pain about the Heart, this commonly goes before the Jaundies, and is its forerunner, and this Paine before any Yellowness appears is called in Dutch *Selbsuchs*, because it follows so easily; sometimes worse diseases accompany the Jaundies with their accidents, or follow as a Dropsie, sometimes the Jaundies follows sa Feaver and other diseases as the Colick, as it hath been declared.

Aurigo.

Redness.

Redness is a Discolouration very sudden, in those that are angry, or shamfac'd or blush, it continues longer in those that are hot, or have hot Diseases especially Feavers: and this Redness appears most in the Face.

Paleness.

Paleness is a Discolouration in which the skin looseth its flourishing Colour, and becomes less coloured then is beseeming. This is usuall in those that are very cold, or sorrowfull and greived, and it comes quickly to those that are affrighted, and to those that faint or swone, in whom the Image of Death is seen till they come to themselves. Sometimes a constant Paleness is the fore-runner of a Disease, and often the Companion of Diseases, and continueth some time after recovery: which Paleness appears in the whol body, but cheifly in the Face, and in those places which formerly were most red, as in the Lipps and Cheeks there is Blewness: also Paleness will be in the Nayls and Yard, when it needs not or cannot, blush, or be red,

The Blackness of Moors.

Blackness is a Discolouration in which the skin appears black: and it is either perfect, such as some have been at their birth, as the Æthiopians; or it is when the skin is not white but tawny, which they call black: which although Naturall to some, yet because uncomely in their Eyes, which esteem that neerest colour to white the best, they count it a Discoloration and Labour to cure it.

Tawny Skin.

Hitherto may be referred the evill Colour of a wrinkled skin in old Age: for that which comes from a Disease and Leanness, continueth not long.

A particular Discolouration is only in some parts of the Skin: by reason of spots or defilements.

They which are from externall Causes, make Impression of a strange colour, or are superficiall.

As that blackness which is from the Sun burning in the Face, and Hands and Breast, in those places where they are used to be naked.

There is also an evill Colour from filth in unclean Persons which sticks to the skin and spoils the colour.

The colouring of the Skin.

Some are dyed in the skin by externall Colours and Paints, this is usual with them that trade in such Commodities; and those that touch them.

Hence the skin is sometimes black, red, yellow, green, &c. which sometimes suddenly vanish, othertimes stay longer and are more fixed and cannot easily be washed out, in regard of the Cause which we shall all at large declare.

The skin is discoulored with divers spots, which sometimes are distinguished only by their colour, sometimes by their bigness and bunching forth; some come with, and some without Diseases.

They which arise of themselves without a Disease accompanying them, are originall spots, as Freckles, Pimples, Fleabites, Erysipelas or Anthonyes fire, blood spots, Gutta Rosacea, Ring-worms, Morphew, black and Blewness.

Originall spots at Moles.

Originall Spots are such as we bring into the World, as Moles, these are called Signs and Marks, and are divers and are of divers Colours and Shapes, as like Strawberries or Cherries, some are depressed broad or little, and are manifest only by the Colour, and they are in the Face sometimes and sometimes in other parts of the Body.

Freckles.

Freckles are dark spots as big as small or great Lentiles, and of the same colour onely they bunch not out, therefore are they called Lentigines from Lentiles: these are sometimes more abundant sometimes fewer, without pain or trouble, only discolouring the body especially the Face, sometimes the Hands and the open Breast, being exposed alwaies to the Air: sometimes they are in the Arms and Feet, and the more manifest when the body is more white, sometimes they appear in Summer, and are gone in Winter, they are constant.

The broad dark Spot.

Of the same Colour are some dark Spots as broad as the Hand in divers parts, and they come and go at certain times.

Fleabits.

They are called Fleebitts which because they resemble such, for they are little and round, and are about the Pores, and they only itch a little.

Bryst,

Spots like Anthonyes fire. Erysipelata or Anthonies fire, are little spots like the great Anthonies fire, but without Heat and only itch a little; they are larger sometimes with a redness over all the Legs, and differ from the true Anthonies fire, in regard there is no Inflammation or Burning but only itching. As I often found being a Youth, by Experience, that when I rid forth, that Leg which was next the Sun was so burnt throw my Boote, that it was very red and itching, yet it was gone in the space of two daies.

Blood Spots. These blood Spots are very like in the Face, Neck and Breast, large and small sometimes, depressed sometimes elevated, continue long, but trouble not but by itching.

The rose Spot. The rose Spot is when the Face or at least the Forehead, Cheeks or Nose are sprinkled as it were with red Drops, the French call this *Coupe Rose* which signifies Copporas or Vitriol, though it be nothing like it; sometimes the Face is swollen with them and full of Pustles, and the Nose very large and full of Rubies.

Ring-worms called Impetigines. Ring-worms or Teters are red about the Edges and the Skin is rough, like that of the Chin, which is scabby called *Lichen*, only they itch not so much, but are as broad and as many, continuing long in the Face, Hands or other parts without Molestation: The Germans call them *Zinermahl* or *Eftechs*, and the French *Dartres*.

Morphew or Vitiligo. Vitiligo or Morphew or Alphi are so called because they change the Colour of the skin, these are whiter then the spots called *Leucæ*, the Arabians call them *Albaras*; others are blackish called *Melæ*, both are ordinarily called *Malum mortuum*, or the dead Evill: others call one white the other the black Morphew. These are not together but dispersed like Drops through the Skin, changing their place and creeping, yet not rough nor scaby or ulcerated, and without Sense, and if they be rubbed they are but reddish, or if you prick them being deep in the skin, yet they cause no pain, nor doth blood come from them but onely Water; when they are where Hair groweth they cause it to fall, and other white thin down comes up instead thereof.

Sugillations, Ecchymoses, Vibices, Stigmata, Peliomata. Sugillations are blew spots after contusion, which when they are nourished by a Humor, are called *Ecchymoses*; if they come from a stroake Vibices in Dutch *Senatthen*, and *Stigmata* in Greek, and by reason of their blewness, Peliomata, and because they are Skie-coloured, the Germans call them *Blawmahler*, sometimes they grow blackish, and are yellow about. They are uneven, narrow and large, with a Tumor at first, and pain when they come from a stroake, and continue long after the Tumor is gone.

In Diseases there are divers spots which are either plain or like Pustles, as in Feavers, Pox and the like.

Erysipelas. In Feavers called *Synochi*, there is often a red spot broad and spreading called *Erysipelas*, sometimes in the Face and Hands, this is described in those pains which it causeth by burning.

The Measles or Exanthemata. In Feavers, especially in Children, there are divers red spots in the Face, Breast and all over in the Pores, about the bigness of Lentiles which they call *Exanthemata*.

Ecthymata or small Pox. There are other spots like the former in Feavers, as big as half Pease or Lentils upon Children that grow up to Pustles, or fall in again or grow blew and itching and turn to matter, and then to a black Scab, by which being innumerable, either standing together or a part, the body is so defiled, that it is ugly to behold. And when these are cured, the face is all their life after filled as it were a Honey comb with the impressions thereof; they call them *Ecthymata*, because they break forth with violence, also *Variolæ* or little Pustles, *Morbilli*, or *Papulæ* that is Pushes, Wheales or Blisters: The Germans, because Children have them usually call them *Kindsblattern*, of which we spake in Feavers which produce them. These are not only in the Skin, but Eyes, Nostrils, Mouth: as we shewed in the Diseases of those parts.

The spots of pestilential Feavers. In malignant Feavers that are venemous and infectious, we have not only those spots mentioned but others called *Petechiæ*, sometimes red like Fleabitts, sometimes like Violets, dark and blackish as we shewed in Feavers.

The spots of the Elephantiasis Pox, Scurvy. In the Elephantiasis there are red and blew Spots in the Face and other parts; and in the French Pox there are the like of another kind: in the Scurvy called Stomacace or evil of the Mouth, there are spots of divers colours in the Legs, and sometimes in other parts, all which are exactly described in the Chapter of Infection.

Of the yellow Spot in the Convulsion. We have shewed in the Treatise of the Convulsion, that one who had the Spasmus or Convulsion, had a yellow Spot that quickly grew up and quickly vanished from his finger.

The Eyes are sometimes discoloured, when from the natural Colour they decline by Redness or Yellowness.

The Natural colour is in that called *Iris* or the Raine-bow, black in the Center bigger or less round about, grey or brown, and without the Circle all white; also when they are spotted or otherwise ill coloured.

Redness of Eyes. Sound Men have often red Eyes by outward heat, or too great Motion, or the Eyes are red from hot Diseases of the Head, or of the Eyes themselves, as in an Opthalmy, or Inflammation or Epiphora a Rheum, in which the Eye-brows rather then the Eyes are redder then usuall. In the Elephantiasis besides other Deformities, there is Redness of Eyes: as we shewed in Diseases which cause red Eyes.

Yellow Eyes. In the Jaundies the Eyes are yellow, as was shewed in that Treatise, and more in the white part of the Eyes, then in any part of the skin, because no part of the skin is so white, as the thick Tunicle of the Eye, and therefore the yellow wil not appear so soon in other parts, as in this most white subject.

Blew Eyes. Divers spots discolour the Eyes, as those that are red or blew in Sugillation, or *Hypostbagma* called blood shot: these are not only in the white but in the Rain-bow of the Eye, and they appear more bloody then in the Skin.

Pox and Measles in the Eyes. Exanthemata and Ecthymata, that is Measles and Pox, as they infect the whol body, so sometimes the Eyes and hurt the sight; and if many Pustles be within the adnate and horny Tunicle called *Cornea*, they cause blindness.

The white spots in the Eyes. The Cornea or horn Tunicle of the Eye is hurt with white spots; if these be right before the Pupilla or sight they cause blindness, but if in the white of the Eye, they neither change colour nor hinder sight, as was shewed in the Pin and Web Scar, and Suffusion or filme in the Treatise of sight depraved or hurt.

Grey and black Eyes. The common people think the Eyes uncomely if too grey, because the clear part about the Pupilla, which useth to change colour, is grey: and the blacker it is by consent from the Pupilla, which is alwaies black, the more comely are the Eyes. Although Ancients commended grey Eyes and called *Minerva Glaucopis* from thence, yet our age alloweth them not for the best, and would change them if it could.

Yellow and black teeth. Also the Teeth, being Naturally white, are easily infectly, and discoloured: as when they are yellow with filth sticking to them; or when they grow black from their own Corruption, or from Vapors in great Diseases.

The

The spots of the Nails. The Nayls are discoloured and spotted by erosion; sometimes they are too black and blew, sometimes too red, which Colour is not in the Nails, but shineth from the flesh beneath through the Nails, as if it were in the Nails; as bruises being under them, are seen through, and blackness in the topps from filth: but in young people especially, there are small white spots in many places of the Nayles, which first rising from the Root, grow with the Nayles and are pared off, and others grow in their Room. The vulgar think that these are a signe of long life in men and women.

White downy hair. The hair is counted discolored only when it is turned exactly white from a Disease, which took off the former. Or when young people grow grey too soon, it is Natural and honorable for an old man to be so, hence the Poet said: In old time grey Hairs were of much esteem.

Baldness. This Greyness comes sooneſt in the beard, though that come forth long after the hair of the head: very red and black hairs are not counted discoloured, although they are by Common People accounted less comely; on the contrary, they that have yellow or gold coloured hair are counted comely, because they are according to Nature, and black also except curled and like the Moores.

Red, black and yellow hair.

The Causes.

All the Causes of Discolouration whether it be general or particular in the Skin, Eyes, Teeth, Nails and Hair, come either from Humors, as Seed, Blood; nourishing Juyce, Choller, or from evil Humors or Filth or other defilments: or from Heat, Cold, or Dryness, as shall be in order explained.

The Parents seed is the Cause of Discolouration. and spots original in the Skin, Eyes and Hair. As we shewed in Deformity, that it came in respect of Number in Deformity, that it came in respect of Number of Parts, Magnitude and Figure from the Parents seed many times; so from the same comes Discolouration, and hereditary Spots; which also as the Diseases in form and figure, come from the seed; and the Natural colour of the skin is derived from Parents to Children, as that blackness which is counted uncomely, comes Naturally from Parents of the same colour: and Children are grey or black eyed like their Parents, and haired, black, yellow or red like their Parents. And as in men often so alwaies in Beasts, they produce their like in colour. This hath been observed to be true also in Birds especially Pidgeons, of which if one or two only be black or different in colour, all the rest being white, there shall be so many and no more of that colour: and if the Eyes of the Pigeon be black, yellow or crystalline, the young will have the like. They that study Pidgeons, are so observant therein, that they remove those whose colour they like not, least the young should prove of the same.

As this similitude of Natural colours, comes from seed rightly and Naturally ordered and disposed, so if it be otherwise, divers colours and strange spots, may come as we said concerning Deformity; namely by transmutation or perversion and divers Causes, amongst imagination can do so much, as that if a woman in the time of Conception or after when with Child, apprehended any thing strongly by sight or imagination, the same shall have impression upon the Child: as Histories report a Woman to have brought forth a black More, by beholding the Picture of a black More in the time of Copulation; also other spots come from hence, as of Mulberries, Cherries, and the colour of a Peacocks Neck and other representations, which we have observed to be Natural (from Parents imaginations) in their Children; some have taught that Beasts have the same imagination to produce the like to what they phansie. As the Scripture witnesseth of *Jacob*, who that he might get Cattel from his Father *Laban*, used an Art, by barking and peeling Rods, that they might be of divers colours, to cause the sheep which looked upon them at the time of Copulation, to produce party coloured young. *Pliny* saies that Pidgeons will produce Pidgeons of divers colours, if the Dove-house be painted with divers colours.

Blood in the superficies of the Body is cause of Redness. From the Blood which is over the skin and the flesh, (which in the Description of a Phlegmon I shewed to be Natural, in regard it is not only gathered in the small Veins of the skin, but the substance of flesh and skin covered therewith) as I say, there ariseth from the blood, a proper colour of the Skin inclining to Rendes, to be seen through the Cuticula or scarse Skin; or as there is a perfect Redness in some parts, as the Lips and Yard by reason of their spungy flesh containing more blood, and in the Yard by reason of Arterial blood, and in the Cheeks, in which the blood is more frequent then in other parts (especially in some constitutions): so, if this blood should be carried more to the Superficies or outside then ordinary, there will be a redder colour but chiefly in the Face, which by reason of its tenderness and loosness receiveth blood more easily. As we see, when the blood is drawn outward with the spirits by external heat, the Body begins to be red, and the Face to blush, and the very white of the Eyes to be dyed therewith: or by the passions of the Mind, in which the blood with the spirits being raised is thrown outward; as from anger the Face will be inflamed and from shame blush, which yet when the blood returns, do all vanish away; in some sooner in some later. For I have observed in some, that redness coming from anger and shame, hath continued a long time after burning in the Cheeks.

Want of blood in the superficies of the body is cause of Paleness. As these things come by Blood in the Superficies of the body, so when it is there wanting, the flourishing colour is gone, and Paleness follows, which turns blew in those parts which ought to be red by Nature as in the Face, Cheeks, Lips and Yard as also the Nails, which when by reason of the red flesh beneath shineing through them they are red, if blood fails are seen to be blew.

These parts are destitute of Blood, through Hunger, Sadness, Bleeding, and Diseases; or if the blood flie from them, they are pale till it return, as the Yard is pale when there is no occasion for blood. And as it is when external cold repells it, the skin is not so well coloured as when hot.

And in them whose Cheeks being red, the Blood being congealed with cold, seems to be of a livid and lyad color, lastly, the same thing happneth when the blood with the Spirits is suddenly down in, as in Fear, Terror and other Passions or in swoundings and faintings, which cause Paleness till the blood and spirits return.

Also divers sorts of spots proceed from Blood, either as it is in the true Skin, or in the Pores, or as it is under the scarse Skin.

The blood spread into the true skin, is cause of Erysipelas, Measles, Pox, and blood spots, the Rose drop and Tetter. In the Feaver synochus hot and burnt blood spread into the true Skin, causeth that Redness which joyned with heat is called *Erisipelas*, sometimes Measles and small Pox, how this was done was explained formerly.

And if blood throw it self to the skin by any other causes internal or external, which expel it or draw it forth, it causeth other red spots; as those Erysipelata which are in one place, and that Redness of Legs which comes from the heat of the Sun, which we formerly spake of.

Also through plenty of Blood, Thinness and Heat, and sometimes Impurity of the same, those blood spots do come into the Face and other parts into which Nature sends it.

And

And firſt the Redneſs of face called *Gutta roſacea*, as it may proceed from the aforeſaid cauſes, ſo from often and immoderate uſe of Wine, it is uſual with Drunkards, becauſe by Drunkenneſs the parts ordained for ſanguifying or making of Blood, and the blood it ſelf being both too hot: that blood being ſent in great Quantity and often, into thoſe parts which are ordained by Nature to receive it, doth at length by often ſupply, cauſe this continual redneſs and Puſtles. This Infirmity is of long continuance, for Blood not falling from its Natural part is not ſuppurated, nor is it eaſily diſcuſſed other waies; alſo it anoys the Face cheifly, becauſe that ſeems more to abound with blood then other parts, and Redneſs is more Naturally there, eſpecially in the Cheeks, which in ſome are red Naturally, or ſpeedily grow red by bluſhing, and this ſhews that Blood can eaſily go to the Face, and return, if Nature be not hindered: but this is ſeldome done when it either offending in Quantity or Quality is often ſent thither, but being there fixed it begets this permanent and laſting Diſeaſe.

It happens alſo that if any Portion of blood which is ſharp come to the Skin, it cauſeth thoſe red and uneven ſpots by exaſperation and corroſion, which we call Ringworms, and the Germans *Zittermahl*.

The blood which is about the Pores, is the cauſe of red, little, and bloody ſpots.

The blood being carried to the Pores of the skin, and ſpreading it ſelf a little ſpace about them, ſometimes produceth ſmall ſpots. Alſo in ſweating, the Blood being carried to the Pores with the water, and there fixing ſuch ſpots remain: and we may perceive the ſame to be done by ſtinging of Greatures and biting of Flees, ſuch ſpots are left, which are ſoon diſcuſſed becauſe ſmall.

Blood under the ſcarſe Skin, the cauſe of black and bleweſs.

If Blood get out of the true skin, in which we ſhewed that it Naturally is under the ſcarſe skin, then being out of its place and not able to return, there it lies and ſhineing through the ſcarf skin, cauſeth thoſe ſpots of the color of blood out of the place, and left by Nature and therefore black and cloddy, ſuch as are in a bruiſe, and they are little broad, or long according as the ſtroke was, and theſe will laſt long, if the blood corrupt not as it often happens when it is incloſed; ſometimes when the blood is thin and ſpreads abroad, they are yellow and broad and when it is diſcuſſed they vaniſh, ſometimes the blood corrupts and eateth through the ſcarf Skin.

The cauſe of Blood thus breaking through the skin is uſually a contuſion made in the Veins or true skin, by which its continuity being divided within, the blood is carried from thence to the ſcarſe skin, for which reaſon, there are divers ſorts of Marks, as from a whip or rod, they are long according to the ſtrokes. And the Eyes are black from a ſtroake, becauſe the blood by that gets out of the Veins of the adnate Tunicle, or into the horn Tunicle. After blood-letting you may ſometimes ſee ſuch ſpots, when the Vein is pricked through, the blood doth not all come forth but ſome remains under the ſcarſe skin: there are none but theſe violent cauſes which divide continuity, which bring the blood under the ſcarſe skin.

Yet from great heat inwardly or outwardly in Diſeaſes, when the skin is thereby dilated and the Blood diſperſed, we have ſeen bloody ſpots under the skin.

And this alſo may come from thinneſs of blood, if when it is come to the Pores it ſweat not forth, but ſtaies there by drops; and this is rarely ſeen as alſo ſweating blood although we ſhewed in the Treatiſe of Excrements that hath ſometimes been ſo.

A general Diſcolouration and divers ſpots come from the nouriſhing Juyce, which is made of blood turned into the parts by aſſimulation, according as it is conveighed (when changed) either into the whol body or to ſome parts.

When crude and unconcocted Juyce, goes through the Body to nouriſh it, the flouriſhing colour thereof is deſtroyed, and another acquired as is ſhewed in Cachexia or evil Habit, of which there are divers ſorts, as the Juyce is only crude, or alſo ſerous and filthy; for if it be crude ſuch as is Naturally in the maſs of Blood, and makes the part which is called Flegm, and that nouriſheth, being carried with the blood through the Body for the ſame purpoſe, if this abound in the blood, or if the greateſt part of the Blood be ſuch becauſe not perfectly made red, and yet not ſo corrupted but it is fit to nouriſh the Body; then this being joyned to the ſubſtance of the Body for to nouriſh it, ſtill it makes the fleſh and skin of the ſame colour pale and white; and the colour is as far from the true Complexion as the blood is, being ſo, or when mixed with evil Juyce or water from evil Concoction. In Women, eſpecially Virgins, when that thick Blood flows not ſo plentifully to the Veins of the womb, nor Nature, which allots the pureſt blood for nouriſhing of the Child, and for monethly Evacuation, doth not continue her courſe to carry it thither, and ſend out the crude and evil Blood; there will be an evil Habit, and want of Terms (as we ſhewed,) the defect or want of the Terms, not being the cauſe of that evil Habit, but the evil Habit the cauſe of the want of Termes.

If the juyce which nouriſheth the whole body be crude, it cauſeth evil habit, if bad it cauſeth ill Digeſtion, or Cacochymia.

But if with the evil Habit, Cachexy and Cacochymy, there be alſo evil Humors about the Spleen which are carried from hence to the meſeraick Arteries; there will alſo be as I ſhewed, a Palpitation of the Heart and other Symptomes, by reaſon of the Cacochyma and Diſeaſes of other parts.

But if this Juyce be crude, and plentiful, and long before it nouriſh the Body, ſo that it ſwell therewith, the cachexy is turned into a Leucophlegmacy or white Flegm; and if there be much water, the Leucophlegmacy will be ſerous: or if the water abound in a Cachexy, there wil be tumor of the Feet, and of the Belly and Body growing leſs, and the Dropſie called Aſcites wil follow the cachexy or evil Habit.

Or if this Juyce, which ought to nouriſh the body, be ſo bad, that it will not nouriſh, or be very little in Quantity, there will be a decay of the Body, and the Cachexy will be turned into an Atrophy. As we ſhall ſee in the Dropſie Aſcites and Atrophy how they follow a cachexy.

This crudity of Blood, if there be ſeroſity or wateriſhneſs, or cacochymy or ſuſpicion of a Dropſie: comes often from the Nouriſhment, if ſuch things be taken which produce crude Juyce or Water: as we ſaid in the Imbecillity of the Stomach, as Summer fruicts that will not laſt, which if they be taken immoderately by young People, make them ſubject to a Cachexy, eſpecially by Virgins being weak and uſing Exercife.

This crude Blood which cauſeth a Cachexy, and evill Juyce which cauſeth a cacochymy, or water which cauſeth a Dropſie comes from the Diſtemper of thoſe parts which are ordained for Sanguification or making of Blood and Chyle; as from the Stomach, Liver, Spleen, and the Veſſels and Membranes thereto annexed. And if the concoction be made imperfect, by the Diſtemper, Weakneſs or other fault of the Stomach; the Chylus be crude and imperfect, or foule and watery, which after in the ſecond concoction produceth the like Blood, becauſe it cannot be ſufficiently boiled, and the rather if the parts ordained for the ſecond concoction are alſo infirme. We have ſhewed treating of the pain of the Heart what kind of Diſeaſes are from the Stomach, and cauſe pain.

Blood that is crude, unconcocted, foule and watery, is made by the Infirmities of the Liver, Spleen and Veins, becauſe theſe parts are ordained for the Generation of blood. The Liver is the Inſtrument of Sanguification. And that Sanguification may be hindered by the Diſeaſes

of the Spleen, (many former Arguments being omitted, by which we ſhewed that the Spleen alſo is the Inſtrument of ſanguifying, and that it may be hindered by the Diſtemper of the ſpleen) we can prove, becauſe as appears by Anatomies, when the Liver is ſound, and the Spleen rotten, there have appeared thoſe faults of Sanguification which have been mentioned, and have cauſed a Dropſie, ſo that we need not make the conſent between the Liver and the Spleen, to be the cauſe. Moreover from the Diſtemper of the Veins, (ſeeing they help to make Blood, whether principally, as ſome think, or make it better after it hath been wrought by the Liver, which all confeſs,) the Blood is leſs concocted and more crude. And this cheifly cauſed by the Diſtemper of the meſeraik Veins, that come from the Liver and Spleen, becauſe the firſt change of the Chyle and preparation of it for Blood is by them, for they ſnatch it and retain it firſt; the Diſeaſes which befal the Liver, Spleen or Veins, by which the ſanguification being diminiſhed, the blood becomes crude, and thence comes the Cachexy, either alone with Cacochymy, or Weakneſs, Diſtemper, Obſtruction, Hardneſs or the like.

Weakneſs of the Liver, Spleen and Veins (which by conſent with the Bowels unto which they are joyned, ſuffer with them) is properly that which comes from want of Natural heat, if it hinder the Functions, ſo that the blood be not ſufficiently wrought, and therefore too crude. Thus it is the cauſe of a Cachexy, in which the Native colour of the body is loſt, and it grows bigger, there is a ſhortneſs of breathing by reaſon of the Diſtemper of thoſe parts, and a preſſing pain of the belly, the Urin by reaſon of crudity is wateriſh, eſpecially if through the plenty of Water they cannot be tinctured with Choller; if this Weakneſs laſt long it turns the cachexy into a Leucophlegmacy by aboundance of crudity, which if it come from other cauſes alſo will make a Leucophlegmacy ſerous or watery. Alſo if from the weakneſs of the attractive faculty of the Liver, there be aboundance of Water not ſufficiently attracted by the meſeraik Veins, the Dropſie Aſcites, as we ſhewed in the Treatiſe of the Dropſie, will follow; but if their weakneſs be ſuch, that the Blood be not only crude, but not enough to nouriſh the Body, it will produce a cachexy, in which the Body is rather leſs then bigger: or if by this weakneſs the ſanguification is loſt, an Atrophy will follow. A cachexy is known to come from this weakneſs, if there be no other accidents or Diſeaſes in the Bowels, it appears by the evil colour of the whole Body that they are weakned, and the Patients ſo affected, are called Hepatick or Splenetick.

This weakneſs comes from this diſperſing of the Natural heat, which is from inward Cauſes from Birth or through Age: or from exremal cauſes, and remaineth after divers Diſtempers of the Bowels, or other long and acute diſeaſes. Among which are Feavers, after which the Bowels being weakned by too much heat, or cold Drink which is uſual, there follows a Cachexy which by continuance cauſed the Feet, Belly or whol body to ſwell. Moreover great loſs of blood, eſpecially of the Menſtrual cauſeth a cachexy, not only by the loſs of Spirits, but becauſe the Veins want refreſhment by their emptineſs, and want of heat with which they were nouriſhed: not onely by reaſon of that crude Juyce which is then produced, but becauſe the Body being exhauſted looſeth its flouriſhing colour. And if the loſs of blood were great the body would rather grow leſs then ſwell. Alſo other Evacuations by which the Spirits are conſumed do the ſame; among which too much Venery in Man eſpecially.

The Diſtemper of the parts and Veſſels ordained for ſanguification, may produce a Cachexy, either ſimple or mixed with Leucophlegmacy, or the Dropſie Aſcites; by cauſing the weakneſs which we mentioned to continue, and by hindering the Actions of the parts. The firſt is a cold Diſtemper which chiefly hinders the Functions, and proceeds by over much and long uſe of cold things: from external cold to which the Body hath been expoſed; from which the conſtitution is known to be ſuch and in regard there is no Thirſt, and the body appears colder with all ſignes of a cold cauſe.

But although the hot Diſtemper of theſe parts, eſpecially of the Liver, doth not at the firſt, nor by long continuance produce this cachexy or evil Habit, Paleneſs or ſwarthy colour, but it appears rather in a freſh colour, (as we ſee in the faces of Drunkards) and brings no great hurt as yet, but only a conſtant Thirſt by which this hot and dry Diſtemper of the Bowels is diſcerned: yet in continuance of time, in ſome ſooner, ſome later; by weakning the bowels, and making them unfit for action (the Sanguification being ſo hindered) the body is thereby diſcoloured and of evil Habit which is a cachexy. And this is turned into a Dropſie (which appears firſt by ſwelling of the Feet and ſhortneſs of Breath, after by other ſigns) becauſe by continual heat the bowels grow hard, dry and cloven; as we ſhewed in the Dropſie Aſcites, whoſe cauſes are chiefly conſtant uſe of hot Wines and Meats or hot Diſeaſes.

The ſtoppage of the Liver eſpecially of the porta and hollow Veins, may be the cauſe of a Cachexy or cacochymy, becauſe it gives occaſion to the production of evil and cholerick Humors eſpecially; which we declared (in the cauſes of Feavers) to be mixed with the blood in the meſeraick Veins, by reaſon the exact ſeparation of them from the blood by the ſecond concoction is hindered; if impure blood be ſent into the body, there is rather a foul then a white colour, and it is brown, ſwart, green or yellow, yet not ſo yellow as when the Pores that conveigh the choler are obſtructed, and the choler is not ſeparated from the blood as we ſhall ſhew in the cauſes of the Jaundies, by which means the Urine in that is not ſo watery as in a cachexy, but it is ſomewhat high coloured. But if this chollerick filthineſs retained by the ſame Obſtruction, and ſent back into the Meſeraiks, be not much diſperſed through the body, there is rather a ſtrange Paleneſs then a colour in the cachexy, alſo the Urine is more crude and wateriſh, and by reaſon of the plenty of choler in the Meſeraiks, there is a looſneſs rather than binding of the Belly, and the Excrements will ſeem rather chollerick then white, contrary to the Jaundies. And if from the Obſtruction mentioned, there follow a weakneſs of the Liver, as it may be from thence, or other cauſes; then becauſe the working of the Blood is leſs, there wil be a cachexy of crude blood; in which crude Juyce nouriſhing the Body makes it ſwell. But if the Obſtruction be ſo great, that by reaſon thereof, the diſtribution of the blood, whether crude or concocted cannot be made into the hollow Vein, or ſuch foul blood is produced that it cannot ſufficiently nouriſh the Body, it will decreaſe: as we ſhall ſhew how an Atrophy comes either when the diſtribution of Blood is hindered by a great Obſtruction, or when the blood is unfit for to nouriſh.

The cauſe of this Obſtruction in the Liver, is either thick or vicid Chyle, made of the like the food when it is faſtned to the paſſages, and grows more condenſed and ſtops the parts; or, as ſome ſay, crude chyle, by reaſon of heat raiſed through violent motion or baths uſed after Meat, which gets too ſoon into the Veins, and is there retained til it ſtop them. And this may come alſo from dryed and burnt Blood, as we have obſerved by looking into the Liver of beaſts which hath produced ſuch Obſtructions by being hindered, and burnt into the aſhes in the Veſſels. The ſame Obſervations in Man and Beaſt, have taught us that Obſtructions of the Liver may come from a ſerous or watery Humor. For we have found, in them that formerly by urine have voided Gravel, the ſame red Gravel to be in the Veſſels of the Liver, ſometimes turned to a brittle ſtone, which being diſperſed through the Veſſels are like white Coral or Ice-ſickles. And theſe came from the Earthineſs of the Serum which ſixeth it ſelf in the ſmall paſſages, as we have ſhewed in the Treatiſe of the Stone in the Kidneys. It is generally concluded that theſe Obſtructions come chiefly from Flegm, which if it be not bred as other

ther Excrements in the Liver of crude chyle and blood, and there laid up; it comes from the Stomach and Gutts, where it is uſually abounding, being brought thither by the meſeraik Veins with the chylus, and there continuing it cauſeth theſe Obſtructions, and the ſooner if it be ſliny, or thin and wateriſh, which will more eaſily get into the Mouths of the Meſeraiks, if by long continuance in the Veins, it grows thick by the heat of the Liver, and ſo become viſcous or ſliny.

Alſo an Obſtruction in the Spleen may cauſe a Cachexy and ſuch s is cacochymical, which declares it ſelf by a filthy colour, in which if the evil Juyce get into the Arteries, there will be beating of Heart and Arteries; and the reaſon is, becauſe when the Spleen is ſtopt, Sanguification is hindered, and evil Humors are heaped up in the branches of the Spleen and gate Vein, which may from the left ſide thereof go to the right, and ſo into the Liver and then be diſtributed with the Blood.

A crude or cacochymical Cachexy, as from other Obſtructions, ſo it may riſe from the Hardneſs of theſe parts or Scirrhus which grows in the ſubſtance thereof, or other hard Tumor which turns to an Impoſthume, for then the paſſages are either partly or totally ſtopped. And this turnes to the Dropſie Aſcites, if from the Diſtemper or Hardneſs the parts be not only ſtopped but left open. And becauſe it is uſual ſo, we ſhall ſhew the cauſes of the dropſie Aſcites more at large hereafter. And in an Atrophy how it cometh, as alſo thoſe hard Tumors of the Liver and Spleen, what are the cauſes of them, and in what manner they are, how they come either from too much drowth of the Bowels, or too thick Juyce which nouriſheth them.

They write that beſides theſe Tumors, the ſpleen may ſwell from wind; but I perceive not how wind can be there to blow it up when it is not hollow. It may be when the wind is gathered into the left ſide, and ſtretcheth either the ſtomach which is moſt on the left ſide is ſwolen with wind, or the colon which reacheth to that part, and this they think to be in the ſpleen.

The nouriſhing Juyce being communicated to divers parts, cauſeth divers ſpots, as it inſinuates either into the Pores of the ſkin or ſome diviſion.

The Juyce which nouriſheth the hair, being diſperſed into the Pores is the cauſe of ſpots or freckles.

When the Juyce which ſhould nouriſh the Hair, comes to the Pores of the ſkin where they grow, it produceth theſe ſpots which are like Lentils viz. Freckles called Lentigines; for being like them in colour, it ſpreads about the Pores, it produceth ſpots: dark coloured or like the Hair. This ſpreading of the Juyce in the Pores comes from the Heat too much attracting it, and dilating the Pores: if then the juyce which nouriſh the Hair, is not only faſtned to the Roots of it, but ſpread further, and there ſtaies to produce ſpots browner or lighter according to the colour of the hair. And theſe appear moſt in a white skin, eſpecially in thoſe Men that have red hair; on their Head, Eye-brows, Face, Breaſt, and eſpecially Hands becauſe theſe are openeſt to the Heat of the Sun. And theſe depart not while the weather is warm.

The too much openeſs of the Pores may cauſe this alſo, by which means the Juyce doth not only nouriſh the hair, but infect that part of the skin which is about them, which is hardly taken off, by reaſon of the continual coming of the ſame Juyce to nouriſh the part, and being juyce that is ſo fit for Nouriſhment, it will neither be ſuppurated nor corrupted. This openeſs of the Pores being moſt where the skin is tender, is the cauſe that, Freakles grow there and are moſt conſpicuous: and we ſee that they are more in the back of the Hands then in the Palm.

Alſo the ſpots may grow from the abundant Juyce, which is ſent to nouriſh thoſe Hairs which are plucked up by the Roots of thoſe parts which are moſt often waſhed or rubbed, as Face and Hands.

Juyce nouriſhing the hair if evil, it gets into the Pores cauſeth Morphew.

If the Juyce be evil which nouriſheth the hair and goes into the Pores then it produceth the Morphew, when brought to the Pores, it is unfit to nouriſh or produce hair, but ſpreads it ſelf upon the skin: as we ſhewed concerning freakles. So this juyce as it is qualified, produceth ſometimes white ſometimes blackiſh Morphew which cauſeth the hair there to fall for want of Nouriſhment and if they grow again, there are imperfect from the fault of the Juyce, thin and like down, and otherwiſe coloured then formerly, and the skin being corrupt and inſenſible, thereby ſends forth being pricked not blood but matter, and theſe break forth ſometimes in one place, ſometimes another, whereſoever Nature ſends this juyce to the Pores.

And this evil Juyce by the depraved aſſimulation of the part where theſe ſpots are, by which aſſimulation that Blood which is brought thither for Nouriſhment, is changed not into convenient Juyce, but into evil juyce like the part corrupted, of which it is nouriſhed, as in the Elephantiaſis, which we ſhewed to be large in many places of the skin, but this is in a narrow ſpace and fewer places. And as in that by a peculiar Infection of the skin other diſeaſes come, ſo do theſe ſpots come from others yet not ſo different from that of an Elephantiaſis, becauſe Morphew often foreruns an Elephantiaſis. A certain venemous force is cauſe of this depraved aſſimilation as of an Elephantiaſis either like it, or unlike it coming from the feed, or lying hid in the Blood and other Humors or by Contagion of the body; for by no other means, can either Flegm or Melancholy which they ſay produceth theſe ſpots cauſe them by their qualities; nor can they be produced of crude Blood, as ſome ſay, for in a Cachexy which comes from thence, there is no ſuch ſpots, and if they ſhould come from thence, as the whol Body grows great with crude blood, ſo would it be all over ſpotted.

Choller ſent to the ſuperficies of the Body, is the cauſe of Jaundies.

Choller being high coloured, if it be ſent to the ſuperficies of the Body, it wil ſtain it, and cauſe the Jaundies. And it appears more the whiter the place is, as in the white of the Eye, and a clear Skin, as in the Palms of the Hands and under the Nayles.

This is not done by that Natural choller which is in the Veins, and is the thinner part of the blood, and is not yellow but red, but by that which is called Excrementitial, which being in the Meſeraiks, is ſeparated from thence into its proper bladder; and it is yellow, or is preternatural, and is green or black. This kind of choller if it be carried from the meſeraik Veins by the Serum, which is the Vehiculum of all Humors, and therewith carried with the blood into the hollow Vein, and from thence by the benefit of the ſame Serum, carried with the blood by the Veins to the exterior parts of the body, and be there ſpread upon the skin and other Membranes, as the Tunicle of the Eye, not by points, as when it produceth ſpots and Puſtles, but all abroad; then inſinuating it ſelf gives it a colour, not being mixed with Serum or Whey doth it burne, as it doth when it breeds Puſtles of it ſelf, onely it cauſeth ſometimes itching in places very ſenſible: alſo part of this choller carried with the ſerous part to the Reins and ſo to the bladder, makes the Urine of the ſame colour and thick.

There are divers cauſes, why when this choller is carried from the Meſeraiks to the branches of the hollow vein, and thence is fixed in the skin and outward parts, that it is not diſperſed by ſweat. The chief cauſes are Segregation and Excretion.

The Segregation of choller in the Meſeraik Veins when it is done in the Liver and from thence by the gate Veins carried to the branches of the chollerick Pore, and the Bladder adjoyning if it be hindered by any Diſeaſe of the Liver, or cannot be perfected by reaſon of the great quantity, being retained in the branches of the gate Vein, at length

length as we said it breakes into the branches of the *Vena cava* or hollow Vein.

This comes often from the Obstruction of the passages of the Choller in the Liver, for then although it be separated from the Blood in the Veins of the Liver, yet by reason of the Obstruction of the Pores, it cannot be refined in the Gall, and therefore being sent with the Serum and Blood into the hollow Vein, and distributed though the whol body, it gives it a tincture of its own colour. This Obstruction we have declared to come from the causes of other Obstructions in other Vessels which cause a Cachexy; from Chylus, Blood, Whey or Flegm, if these while the choller doth distribute it self into the Pores, go in with it, and being there detained grow thick, or turn to sand, as we have seen in Anatomies. The same Obstruction may come from thick slimy Choller, which sticks long in the narrow Pores, especially if it grow as hard, as it doth sometimes in the Ears, whereby they are stopped while it is drawn out, and this may be either from the clammines of the Choller, or from the heat of the Liver which burneth it: and also it may be in the Gall and in the Pore that reacheth to the Guts, and sometimes be turned into a stone, if there be an Obstruction as we shall after declare.

Also Tumors and Scirrhus of the Liver, as they shut up the Vessels of the Liver, and a Cachexy so when they stop the Passages of choller they cause a Jaundies, which forerunns a Dropsie: as shall be shewed.

And if any Imposthume or Filth happen in this part, it may be then, that the humors not being separated but confused, there may follow both a Dropsie and Jaundies.

Also an Inflamation of the Liver, by making the passages in like manner straighter, and by inflaming the choller, and driving it into the hollow Vein, doth couple a Jaundies with its Symptoms.

Sometimes it falls out by the plenty of choller and its abundance in the Meseraiks, that when all cannot be separed into the Gall, and it cannot receive it, although it be sometimes very large, then some of it carried into the hollow Vein, and thence carried outward, being yellow, if it keep the Nature of excrementitious Choller, or otherwise green or black, doth infect the Skin with the same colour, and cause either a black or yellow Jaundies. And this it doth sometimes before it cause another Disease, when it is plentiful there, and breaks into the Veins, it produceth a jaundies a forerunner of other chollerick Diseases. Otherwise when it lies and putrifieth and produceth intermitting Feavers, because in the fits thereof there is some part thereof alwaies sent into the Veins, it is dispersed by Sweat, and if this be not enough it joynes a jaundies to the Feaver: or if all the matter of the Feaver be sent by a crisis from the Meseraiks to the skin, it produceth a Jaundize that cures the Feaver. And this may be in other Diseases that come from corruption or abounding of Choller in these Veins, and so a Jaundize may either accompany or follow them, as we said it was often in a cholick pain from Choller, if it partly be carried to the Gutts, and partly remain it joyns a jaundize with the cholick, or when the Cholick ceaseth being not sufficiently purged by Nature or Medicines, it leaves a jaundize behind which is easily cured, as is mentioned in the Treatise of these Diseases. For often by Nature help which will not endure that which is hurtfull being stirred up by a sharp Humor, which while it is in the Veins is tempered with Blood, and so may lie longer concocted, it is carried into the great Veins if not to the Guts in which the Meseraiks end, as is usual by purging.

And this may be the cause why a jaundize may come after Poyson taken, Nature so disturbing and moving the Humors, except it doth it by some other occult or hidden Quality, by which in Poyson it attempteth divers Operations especially in those who are very chollerick.

From which cause as divers kinds of jaundies do proceed, as aforesaid, so it will be sooner produced if any disease of the Liver aforementioned do hinder the separation of choller.

Some have taught that this separation may be hindered in the Spleen, by its Diseases, as by Obstruction and hardnes as in the Liver; and then black choller which they suppose to be lodged in the Spleen will run into the veins, and cause the black jaundies. But since we can perceive no such choller in the Spleen, nor any place to receive it, it cannot be so, nor if it were there could it be carried into the hollow Vein which toucheth not the Spleen with any branch thereof; and if it should be carried into other Vessels, it should be into the branches of the Artery which are annexed to the Spleen: and then greater accidents would follow then a jaundize. Therefore it is not necessary to seek for this black choller in the Spleen, since it is contained in the branches of the gate Vein, the right whereof is carried to the Liver, the left to the Spleen, (by which we do not deny but some Portion is carried to the Spleen) if it be preternatural, as is said, and be yellow, green and black, nor can it be by any way either on the right side or the left, sent into the hollow Vein but by the Liver. And except this be, the Disease only of the Spleen will never cause the jaundies: we have shewed that the causes of this black choller, or green or yellow abounding in intermitting Feavers, which come from thence are (as a quartan) from Choller, and not from that choller which is in the Spleen.

If there be not a voiding of Choller by the *Porus cholidochus* into the Guts, then it will rise from the Gall, and ascend by the top of it into the Liver and its Veins, and is not separated, but goes into the hollow Vein and causeth a jaundize, and then the Excrements of the Belly being not died with Choller, are not coloured, nor do they provoke the Belly to discharge them.

And this may be done by the same causes, by which the separation is hindered through Obstruction of the Vessels, as Humors, when they fall into the Pores and obstruct them; or Tumors if they press upon the Neck of the gall-or the Pore that descendeth: or by the proper Disease of the Gall, or its Inflammation or Tumor; or stones therein which are sometimes found of a Gold or Silver colour, as also when the Choller is made more sticking and thicker, as that in the Ears, the like whereunto we have found in the Gall being dissected; and these if they get into the narrow parts of the Gall, and stick in the Pore, wil hinder (as I said) the descending and purging of choller.

But the Jaundies is not only from the coming forth of the choller, after this manner, but being thrown from the hollow Vein to the skin, which may be evacuated by the Pores by which Sweat with the Serum, as is usual, but if not, it will stay there and discolour the skin, and the less if any be spent by sweat, and not at all, if all be drawn forth by sweat. This suppreision of sweat, comes from the binding or closing of the Pores of the skin, from divers causes otherwhere mentioned. Hence is it that in a chollerick sweat, where it is abounding and when it hath been caused by heat and Baths, if they suddenly go into the the cold, they have often their skin yellow, which with sweating again will be gone. I had lately a Patient which was often all over of a Saffron colour, and this went away as often as he did sweat, and returned again presently after.

The spots of which we here speak are not of pure choller, nor the Freakles, which we have shewed to proceed from Nutriment; as other spots and Pustles, which rather trouble with heat and pain then discolour, as Anthonies fire; of which we spake concerning pain.

Evil Humors in malignant Diseases, are the cause of evil spots in infectious Feavers and the Pox.

Divers spots rise from evil humors in malignant Diseases, as in pure, putrid, malignant, pestilential and venemous Feavers and in the small Pox, Elephantiasis, Scurvey and the like: as we shewed. Which Humors or Poysons by what force they do it in those Diseases which they cause, as well as spots, we have shewed as much as we could find out in such hidden Causes.

The

Filth is the cause of an evil Colour in the Skin, under the Nails, and of the Yellowness and Blackness of the Teeth.

The colour of the Skin is poluted by filth adhering, as we shall shew when we speak thereof in things cast off.

Also the dirt that gets in between the Nail and the Skin, where they are divided, shining through the Nails make them look black and filthy.

The teeth are very subject to pollution, and either yellow, or blew or black, and when they are most white it appears sooneſt, the causes whereof we shall shew hereafter in things rejected.

External colours are the causes of Discoloration of skin, Nails and Teeth.

The Skin, Teeth, and Nails, and Hair may have divers Colours from divers fouling things, or that discolour. So the skin of the Hands is made black by touching of Walnuts, and so continueth for some daies: sometimes it is made yellow, red, blew, or the like by herbs and Paints. And the Americans do paint themselves being naked, that they may be comely. And wanton Boys with us, scarifying the skin and rubbing in Gun pouder, do make certain Markes and Characters thereupon very artificially. Also the Teeth are so coloured, among which astringent things do chiefly black the Teeth. The Nails are discoloured, and made black, in Curriers by often touching Lime and Lye or Lixivium and it lasteth long.

Heat which enlargeth the skin, is the cause of a red and lively color. Cold which thickneth the skin is the cause of a dull Colour.

Heat, as we shewed, by attracting the Blood makes a lively red Colour, and cold by repressing the Blood makes Paleness, also Heat by dilating the skin makes the red colour shine forth better, and cold by astringing makes it less clear, and this is the cause that they which are hot have a fresher Colour; and they which are cold are more swarthy.

The dryness of the skin is the cause of a worse Colour, as black.

Also over dryness of the skin changeth the Colour and makes it more obscure, because by Dryness the skin is made thicker, and by astringency or binding it wrinkled; because thickness makes it black, and Wrinkles making a shaddow render it more obscure: as we see the skin being burnt and dryed by the heat of the Sun becomes blacker, and being withered by age it is more dusty and black. The same comes to pass, if the skin be made by a Disease or looser by the Consumption of the flesh under it becomes wrinkled, which before was stretched out; or if over moistned with bathing it will wrinkle.

In the Eyes there are white Spots or Scars, by reason of the horny Tunicle dried and made hard.

The dryness of the Membranes of the Eye is the cause of the white spots therein.

And by reason of the drying of the watery Humor this white spot or suffusion, appears through the seat of the horny tunicle that is nigh against it, when the prespicuity with which the Tunicle and Humor ought to be adorned is lost, and that Whiteness follows it. And we see the raw white of an Egg is clear and bright, but being boiled or rosted it becomes exactly white, and looseth its prespicuity. We have sufficiently declared in the defects of the sight, which come from spots what is the driness and hardness in the bright parts of the Eye, and from what causes it cometh.

The dryness of the Nails is the cause of the white spots in them.

There are also white spots in the Nails, where their transparency is lost in a point from the like causes; and this comes from the Nourishment, if there be in it the least portion differing from that which should repair and preserve the clear substance of the Nails though it be fit to nourish otherwise, being different from the thick Nourishment of the Bones, and mixed with this more bright Nourishment of the Nails, the Nail makes that portion which is contrary unto it obscure, white, and not clear white as the rest is. And this is most usual in young People, because while their Bodies grow, their bones grow also, and it is then more plentiful because they abound with Nourishment, and there may easily cause these spots; as we have declared, divers hard Tumors to grow from the confusion of nourishing juyce.

Moreover, we have observed that the Nails have not been only streaked with white spots in some parts, but that in some old people they have been all thick white, they being so dryed by age and hardned, that they have totally lost their cleaness and transparency; from this reason we may observe that Hornes, Bones, and Quills, being burnt grow white.

The dryness of Hair is the cause of Baldness.

The same is in hair, they grow white and grey after they have lost their clearness (which the hair hath as well as the Nails and the horny Tunicle although by reason of their smaleness it is not so apparent, but it may be known by the splendor and shining) through dryness and hardness. And this happens often to them as to the rest more often, because they are very dry: and therefore in age they grow dryer as other parts, and they are dryed first about the Roots, and so grow altogether grey, and some sooner, some later, as they grow dry sooner or later, and they are grey either in the beginning or progress, or end of their age. This is not done by other causes, because the hair is not easily altered, albeit it is supposed by the vulgar that care and griefe wil make them grey, which can scarse be done but by their hastening of age: although it be recorded that some have suddenly turned grey. That hair is white in divers places distinct, in some and not in others, the uneven Disposition of the hair and the skin wherein they grow, may be the cause. And this is to be observed, that the thicker the hair is the sooner it turnes grey, and black sooner then red, because when grey hairs appear they are sooner discerned. And this is the Cause that the Beard being younger then the hair of the Head, yet is sooner grey.

The Cure.

The Cure is divers, as the Discoloration is either in the Eye or skin, Teeth, Hair or Nails.

The convenient Cure of Discolourations of the skin is applied first to generals and particulars.

The Cure of Generals is directed at the cause whether it be the nourishing Juyce, Choller, Blood or Seed.

The Cure of Cachexy or evil Habit of body.

That Cachexy which comes from crude and imperfect juyce, in which flourishing Colour is lost, and Paleness is brought in, or the like. if there be a Cacochymy or evil digestion there with, and it come from the weakness of the Liver or spleen not yet confirmed, or from Obstructions; from Humors not yet fixed, is easier cured. But if this weakness of the Bowels in Sanguification, or Obstruction is fixed, then it is easily turned into Leucophlegmacy or white Dropsie, or into the Dropsie Ascites; of which two sorts of Dropsies the first is easiest cured, except some other Distemper be joyned therewith.

A Cachexy is most difficult and can scarce be cured if there be exceeding weakness of the Bowels or great Obstruction, coming from a hard fixed gravelly Matter, as also if there be Hardness, Scirrhus or any Tumor in these parts which causeth the Dropsie Ascites it is incurable.

A Cachexy must be cured according to the cause, which we said is the weakness of the Liver, Spleen, Meseraiks, a cold or hot Distemper, an Obstruction, and hardness or Tumors in the same: which if they have been brought by any external or internal cause that must first be removed, as evil Diet: great loss of Blood, too much Venery and

the like which we know have been the Original of these Distempers, and do still nourish the same. Then the Filthiness which is brought thereby must be purged: and in the mean time if it come from Weakness we must strengthen, if from a cold or hot Distemper, we must alter that; if from an Obstruction we must open, if from a Hardness or hard Tumor we must endeavor to mollifie and dissolve it by Medicines internal and external, using those things especially which are proper for these parts affected: and are therefore called Hepatical or Splenetical Medicines or at least you must mix them with others, and add those things which strengthen the Stomach if it be weak. All these Medicines we shall reduce to two Heads, because one Medicine if compounded of divers things, may be applied to divers Causes. And under one Head, we shall lay down those things which are proper to one or more of the Causes, in Imbecillity or Weakness, in a cold Distemper, Obstruction, Hardness or hard Tumor: under the other Head we shall propound those Medicines which are fit for the cure of a Cachexy coming of a hot Distemper, because this requires a cure by it self something different from the other. We shall begin with that cure which is to be done with the Medicines under the first Head, by this way following.

In these kinds of cachexies, sometimes you may open a Vein, if the Liver be stopped and full; by which the blood being moved, the evil Humors in the Vessels of the Liver may with the Blood be a little abated, especially if there be a cochymy in the Blood, it will be convenient to draw it forth: and this is done in the right Arm, where the lowest Vein is most convenient, and therefore is called the Liver vein, which also may be opened in the Hand; or in the Foot if there be Suppression of the Termes; in the like Diseases of the Spleen, if there be a cacochymy also in the Veins, you must open the Vein in the left Arm, or the *Salvatella* which is proper when the Spleen is distempered.

The opening of the Hæmorrhoids is very profitable by drawing from the Meseraiks in the stoppage of the Liver, Spleen or Meseraiks, and also by letting forth the cacochymy or evil Juyce.

Vomiting in the Obstructions of the Liver or Spleen, is good, not only by taking away crudities, but by stirring up Nature to send them forth, and this is best and easiest after Meat.

Clysters which mollifie, provoke, and open Obstructions are to be injected, and are made of the common Decoction with the opening Roots, *red Vetches, the four great cold seeds*, and dissolve therein some *purging Electuaries* and sometimes *a quarter of a Pint of Vrine, and half an ounce of the sharpest Leaven, besides common Oyls or of Cappars and flower-de-luce.*

Or you may use the Glysters mentioned in Leucophlegmacy.

Purges are appointed in Obstructions, so Nature being moved may alwaies thrust some of the stoppinges forth; also they are good in weakness of the parts, Distemper or Hardness because many Excrements are gathered. And they are made of such as purge choller or Flegm, and Melancholy in the Distemper of the Spleen, because it is thought Melancholy Juyce doth abound there, and you must add such things as respect the Stomach and discuss wind, if it tend to a Leucophlegmacy or white Dropsie, or things that expel Water if it tend to the Dropsie Ascites, as is mentioned, but here these following are good for a cachexy. A Decoction proper in the Obstruction of the Liver.

Take *of Liquorish-Roots one ounce and an half, of Succory and Flower-de-luce Roots each one ounce, of Smalage Roots half an ounce, of Asarabacca Roots two drams, of Chamæpytis or Ground pine, Germander, Agrimony, Maiden-hair each one handful, of Fennel seeds two drams, of Parsley and Rocket seed each one dram, of Elder-flowers one pugil, Raisons two ounces, Senna one ounce and an half, of Carthamus seeds bruised and Polypody of the Oak each one ounce:* make a Decoction in Water and the third part Wine, and infuse in the strained Liquor *of Rhubarb half an ounce, Agarick three drams, Ginger one dram, Spikenard half a scruple.* strain it and add as much Sugar as is sufficient, and aromatize it with *Cinnamon and Cloves for three doses.*

Of the same things dry a Wine may be made by infusion in four or five pints which will work better, and it will be stronger if you add *Wormwood two drams, Topps of Centaury one dram, Birthworth Roots and Squills prepared two drams.*

Another Decoction for the Spleen.

Take *of the bark Cappar Roots and Tamarisk each one ounce,* macerate them in Water and the third part of *Vinegar, Germander, Ceterach each one handful, of both the Bugloss-flowers and Broom flowers, each one pugil, of Fennel seeds two drams, of Park leave seeds one dram, of Raisons stoned six drams, of Polypody one ounce and an half, Senna one ounce:* make *a Decoction, for three doses, aromatized with Cinnamon, and sweetned with Sugar or syrup of Maiden-hair, or the like.*

Or thus, Take *of Capar bark one ounce, Pot Mercury, Fumitory, Time, Epithimum each one handful, Broom flowers, Tamarisk, Rosemary, Borrage, and Bugloss flowers each one pugil, of Raisons ten pair, Sebestens five pair, Senna one ounce, Polypody one ounce and an half:* make a Decoction in the strained Liquor infuse *Myrobalans, Chebs or others half an ounce, Rhubarb two drams,* strain it and add as much Sugar as is sufficient for three doses, *if the barks of the Roots of black Hellebore* be added it is the better.

A plainer Decoction for the Obstructions of the Spleen is made *of Mercury and Fumitory* new gathered, in *Whey,* or *Broath of an old Cock* to which you may add others, you may also give the Decoction and Wine, described in the Leucophlegmacy, especially if you perceive that it tends to that.

A Potion *of four scruples of Rhubarb* made with Wormwood wine or opening water is good, or the pouder drunk with those Liquors or with Plantane water, if the Termes flow and cause a cachexy, to which you may add *two ounces Syrup of Roses solutive.* Or give the Potion prescribed in Leucophlegmacy.

Other Potions made of altering Decoctions after to be mentioned are given, by infusing *Rhubarb, Agarick* and the like, and dissolving purging Electuaries for choller in the Liver and Melancholy in the Spleen.

Pills often taken being bitter and Gummy are excellent in a cachexy.

These are convenient in Obstructions and Hardness.

Take *of Gum Ammoniacum dissolved in the juyce of a Flower-de-luce and pouder of Rhubarb each half a dram, with Oxymel make Pills for one dose,* you may add *Agarick* and they will work the better.

Or these; Take *Aloes two drams, Rhubarb, Agarick and Mechoacan each one dram and an half, Gum Ammoniack dissolved in Vinegar of Squills half a dram, Mastick one scruple, Gentian and Birthwort roots, or Madder topps of Centaury two scruples, Asarum roots, Smalage seed each one scruple, Ginger and Spike each half a scruple, with the Extract or inspissat, Juyce of Wormwood, or Flower-de-luce, or Syrup Byzantine, or Turpentine:* make a Mass, you may quicken it with *Diagridium* if you wil have it purge more.

Or thus, Take *Turbith one dram and and half, Rhubarb one dram, of Gum Lack, Bdellium or Sagapen, and Mastick each one scruple, of Asarum roots, and Agnus Castus seeds each one scruple, of Schænanth, Spikenard and Saffron each half a scruple:* mix them as the former into a Mass, and you may make them work better with *Diagridium.*

Or thus; Take *of the best Aloes two drams, of Rhubarb and Agarick each one dram, of Scammony half a dram, of the Troches of Eupatorium or Rhubarb, or any other opening pouder each one scruple, Spikenard half a scruple, Mastick one scruple, Gum Ammoniack dissolved in Vinegar half a dram, with syrup of Vinegar make a mass.*

The *Pills of Mandlin* prescribed by *Meuc* are usually good, they are made *of Rhubarb, Myrobalans, Aloes, Mastich,*

stich, Saffron, Juyce of Maudlin, Wormwood and Endive.

Or *the Pills of Rhubarb made like those of Rhubarb, Myrobalans, and instead of Aloes, of Hiera Picra, and Mastick, and seeds of Smalage, Fennel, Troches of Diarhodon, Juyce of Wormwood, Liquoris and Fennel water.*

Also in flegmatick Men *the Pills of Agarick*, as in the stoppage of the Terms, which have *Agarick, Turbith, Hiera picra, Coloquintida, Myrrh, Sarcocol, or Mastich, Orris-root and Horehound.*

Or Pills made of stronger things to all which you must add *Gum Ammoniack dissolved in Vinegar*, if there be a Hardness; and they may be made up with the *Juyce of Orris or Wormwood*, they use stronger in the Spleen, of the five kinds of *Myrobalans*, and other things to purge Melancholy.

In great Obstructions these following are very efficacious. Take *of Coloquintida four ounces, Extract of Tincture with spirit of Wine*, to which after add *the powder of Aloes, Myrrh and black Hellebore each one ounce*, let them stand in the Sun till they are as thick as Honey, then add *Saffron, Cinnamon and Brimstone each one ounce*, then set them again in the Sun till they are dry, then pouder them, and with Honey make a Mass, the Dose is from *a half a scruple to one scruple, and to half a dram* in the strongest Bodies.

These Pills are best, when the Terms also are stopped.

Take *of Aloes one dram and an half, of Mirrh, Madder or Birthwort each half a dram, of Agarick and Turbith each one dram, of Gum ammoniack dissolved in the Juyce of Flower-de-luce half a dram, with syrup of the five Roots:* make a Mass, let her take them often.

If the Terms of Hæmorrhoids flow too fast, make Pills thus. Take *of yellow Myrobalans one dram, Rhubarb one dram and an half, of the Pouder of Diarrhodon and of the three Jaundies each half a dram, with the Juyce of red Roses*, make a mass, give half a dram or more sometimes.

An Electuary in Obstructions. Take *of Mechoacan three drams, Turbith one dram, Rhubarb two drams, Cinnamon one dram and an half, Ginger one dram, Spike one scruple, of the pouder of the three Sanders or the like one dram, the Pulp of Raisons boiled with Sugar as much as will make an Electuary, Diagridium* may also be added.

Rhubarb alone four scruples in pouder with the Pulp of Raisons made into a Bole is excellent for the Liver, and it is called the Soul of the Liver: some eat it.

Tablets for the same. Take *of Rhubarb one dram and an half, Mechoacan one dram, Gentian one scruple, Mastich and Gum ammoniack dissolved in Wine each half a dram, Sugar dissolved in the best Wine, and Juyce of Flower de-luce one ounce, boil them to Lozenges*, if *Turbith* or *Diagredium* be added they will purge the more

These altering Medicines which are in the cause of weakness of the Liver, must be such as repair the Native heat which is lost: and such as are proper for the parts, rather temperate then hot, or cold. In Obstructions we use openers and abstergents or cleansers the strongest in the Spleen, adding alwaies some things which gently bind both for the Liver and the Spleen to strengthen them, or that can open Obstructions by propriety, as Endive and Succory which open and cool, the opening Quality appears by the bitterness. To these add things against the stone if there be a suspicion of the stone in the Bladder.

For Hardness and Tumors we use Emollients, mixing also those things which dissolve and consume what is mollified, or using them by turns: which Emollients, if a hard Tumor which may be converted into an Imposthume be in the parts will be also good when it is ripe. Besides these in Diseases of the Spleen, we usually mix things that discuss wind, because the spleen is easily disturbed with wind, and sometimes swoln therewith. And this Opinion was because the wind was in the Hypochondria, Stomach or Neck as I shewed, therefore if the Liver or Spleen be stopped or hard, and there be wind in those parts you may mix the aforesaid. But these are given in divers forms, sometimes simple or solide, sometimes mixed.

Among the liquid things which are drunk are divers Decoctions, which are so taken or boiled into syrups and so kept for use.

We boil in Broaths *the Roots and Herbs of Parsley, and Fennel, Spriggs or roots of Asparagus, Grass, Vetches, Melonseede and in the Spleen Purslain.*

Physical Decoctions which may be taken before for preparatives to Purges, or after, which open the Obstructions of the Bowels are divers as follow.

The usual Decoction which is kept in form of a syrup is of the two Roots so called, *of Parsley roots and Fennel roots with Sugar.*

Of the five opening Roots you may make it thus. Take *of Smallage roots, or Marsh, Smallage of the Chops of Parsley roots or true Smallage, of the Chopps of Fennel roots steeped in Wine each two ounces, of Grass roots, Asparagus and Butchers Broom each one ounce:* make *a Decoction with Sugar or Syrup.*

Also thus, Take *of the five opening Roots each one ounce, or Orris, Liquoris, Calamus, Elicampane each half an ounce, of Endive, Succory with the roots, Dandelion with the roots, Maudlin, Germander, Groundpine, Veronica each one handful, of Elder-flowers one pugil, of the four cold great seeds three drams, of Endive and Purslain seed each one dram and an half, Asparags seed one dram, of Anise-seed two drams, of Fennel, Smallage and Parsley seeds one dram, of Raisons stoned one ounce and an half, of red or black Vetches one pugil:* boil them in Water with the third part of Wine, especially if the Roots were not steeped in Wine, and in the strained Liquor add Sugar as much as will sweeten, for some doses, and aromatize it with *Cinnamon one dram, Spike and Shœnanth, each half a dram:* make an Apozem, or boil it to a syrup with more sugar and keep it for use.

This will be better for the spleen, if you add to some or all the aforesaid; *Barks of Cappars, Tamarisk, or Ash, scraped from the outside each one ounce, of Asarum and Madder roots half an ounce, of Maiden-hair or Goldylocks, Ceterach, Dodder, both Bugloss, Fumitory, Hops each one handful, the Flowers of both Bugloss, Tamarisk, Broom each one pugil, of Agnus Castus seed or Rue, one dram:* mix them with the rest for a Decoction when we will open more violently we use bitter things, *as Birthwort roots, Squills prepared, Wormwood, Horehound, Topps of Centaury.*

If the stomach be also weak, or windy, you may add *the roots of Masterwort, Calamint, Mints, Marjoram, Rosemary, Polymountain, Carna seeds, Cummin, Bay-berries, also Mastich.*

The *Decoction of the roots of Fern, Rhapontick, Eryngo, Valerian, Chamælion, Cardous, Osers, five leave Grass, Wild-sage, Alkanet, Lovage, Water-lillies, also the herbs of St. Johns-wort, Scordium, Mouse-ear, Burnet, Dropwort, with the roots, Pine leaves, Capar seeds, Woodbine, Spurgewort, square Parsley, Rocket*, of which one or more may be boiled or mixed with the former Decoctions.

If there be fear of a Dropsie, add *Ivy-berries, Gum Lac* and things that purge water, as shall be shewed in the Dropsie.

In Hardness and Scirrhus the same things are good adding some softners, *as Althea roots, Mallows, Violets, Figs, Chamomel and Melilot flowers and the like.*

Some syrups are made *of the Juyces of Plants, as of sharpe Juyces*, when there is heat, *and Drought, syrups of Sorrel, and Vinegar, made of Vinegar water and sugar.*

The simple Oxymel is made of Vinegar, Honey and Water, the Oxymel of Squills of vinegar of Squills, Oxysaccharum is made of Pomegranate Juyce, Vinegar and Sugar.

These Syrups are in use which are compounded of the Decoctions and Juyces which are sharp.

That *of the five roots of Mesue.* Take *of the Decoction of the five opening roots, Sugar and Vinegar.*

Oxymel simple is made of Vinegar, Honey and Water, and compound of the Decoction of Smallage, Parsley, Fennel, Butchers broom, Asparagus roots, of Smallage, Fennel and Parsley seeds.

The Oxymel that provokes Urine. Take besides the Vinegar, Honey, the Decoction of the roots of Smallage, Parsley, Fennel, Raddish, Asarum, Lovage, Broom flowers, seeds of Fennel, Parsley, Asparagus, Butchers broom, Coriander, Cummin.

The Compound Oxysaccharum of Nicolas *is made of the juyce of Pomegranates, in which are infused roots of Fennel, Asparagus, Butchers broom, Grass, Maiden-hair, Harts Tongue, Golden locks, Ceterach, Liver-wort, Violets.*

Compound acetosus or syrup of Vinegar is, Take *Vinegar-water and sugar, which is the simple, and besides these roots of Fennel, Smallage, Endive, Anise seeds, Fennel-seeds, Smallage and Endive,* some add *the Juyce of Endive, Smallage, Liquoris, Roses and Spike.*

The Byzantine syrup Compound of Mesue *is,* Take *of the aforesaid syrup of Vinegar with Anise seed, Fennel and Smallage seed, Juyce of Endive, Smallage, Liquoris, Roses, Spike and Juyce of Hops and Bugloss.*

The usual syrups are made *of bitter Juyces of Endive, and Juyce thereof boiled with sugar.*

Of Fumitory simple, with the Juyce thereof and sugar, of Hops, of the juyce of them, of Fumitory and sugar.

Byzantine simple of Mesue, *is made with the juyce of Endive, Smallage, Hops, Bugloss and sugar.*

In like manner other Syrups may be made of Juyces and named from them, *as of the Juyce of Smallage, Parsley, Fennel, Maudlin,* and other openers proper for the Bowels.

The syrup of the juyce of Water cresses, and Brook-lime aromatized with Saffron and Cinnamon and made sharp with a little Rose-vinegar, is excellent to open Obstructions.

Simples Compound of Juyces and Decoctions are these in use, the three first for the Obstructions of the Liver, the three last for the spleen, the two last purge.

The Compound *syrup of Endive is made of the Decoction of wild and garden Endive, Liver-wort, Bugloss, Lettice, Maudlin, Balm, Cordial flowers, great cold seeds, white and red Sanders, the juyce of Endive, Pomegranates and sugar.*

The syrup of Succory with Rhubarb and its Correctives, of Spikenard, of Nicholas *is made of the Decoction of wild and garden Endive, Succory, Dandelion, Sow Thistle, Liver-wort, Lettice, Fumitory, Hops, Maiden-hair, Alkekengi or winter Cherry, Ceterach, Fennel, Smallage and Asparagus roots, Barley and sugar.*

The syrup of Eupatorium Mesue *with Rhubarb is thus made.* Take *of the Roots of Smallage, Fennel, Endive, Liquoris, white Thorn, Rhubarb, Asarum, Dodder, Wormwood, Maiden-hair, Eupatorium or Maudlin, Flowers of Roses, Bugloss, seeds of Annise, Fennel, Schœnanth, Spike, Mace, Mastich, juyce of Smallage and Endive.*

Syrup of Harts Tongue is made of the Decoction of Harts-tongue, both Endives, Liverwort, Dodder, Wormwood, Maiden-hair, Flowers of both Bugloss, Roots of Fennel, Parsley, Butchers broom, the great cold seeds, Mace, Spike, Cassia Lignea, Gum Lac and sugar.

The Compound syrup of Fumitory is made of the Juyce of Fumitory, the Decoction of Myrobolans, and sugar, Dodder, Wormwood, Violets, this is called the lesser syrup. To the greater they add purging things, *Epithimum, Polypody, Tamarinds, Prunes, Raisons, Liquoris, Flowers of both Bugloss, Roses, and pulp of Cassia,*

The syrup of Epithimum of Mesue *is made of the same things with Fumitory, the greater, except Cassia, adding Agarick, Time, Calaminth, French Lavender, Anise seed, Fennel seeds and Sapa, or boiled Wine.*

Some Juyces may be strained and drunk crude, but they are better in syrups.

Wine also if clear and thin, easily makes way and opens Obstructions.

These are very good Physical Wines by infusion or maceration of some things with a little boyling in a double Vessel, as of Wormwood, some steep it in a little *Aqua vitæ* to take away the Bitterness, or burn the *Aqua vitæ* so steeped and quench it again before the strength is gone.

Tinctures of spirits of Wine and Aqua vitæ are made also of Zedoary, Masterwort, and Saffron, which altogether or alone are given with good success, or make this.

Take *of Succory, Smallage, Orris each one ounce, of Wormwood two drams, of Groundpine, Germander, Maudlin, Marjoram each one dram, of Fennel seed one dram and an half, of Parsley seed one dram,* to these being dryed and cut add five pints of Wine.

And if you will have it for the spleen; Take *the barke of Capar Roots, the Middle Rinds of Tamarisk, Ash, and Elder each six drams, of Ceterach, Broom flowers, and Elder flowers, and Agnus Castus seeds each one dram:* they may be steept in Vinegar before they are put to the rest, or you may add Vinegar to the Wine in the Decoction.

It will be better though very bitter, if you add *of the tops of the lesser Centaury one dram, or of Gentian or Birthworth Roots two drams, of Asarum Roots one dram, or as much of Squills prepared.*

You may also add other things mentioned in the Decoctions, *as Roots of Rhapontick, Fern, Valerian, the bark of an Ash, Madder, Calamus, and the like;* which being dry keep their Vertue, or you may make Wine of these only.

Wine of Raysons is said by a Propriety to help the Liver, and strengthen it being weak, and this doth resemble in part the Colour and Taste of sweet Wine. Take *of the smaller Raysons five pound, of Cinnamon bruised two ounces,* put them into a Vessel and pour upon them ten measures of boyling hot Water, stop it up till it work, to this you may add the opening Roots that are not unpleasant in taste.

Like to this is made an excellent Drink to open Obstructions *of Juniper-berries, and Juniper Chipps, to which if Currance* be added it will be better.

Wine of Steel in which steel was quenched, is of the like Vertue, and is chiefly for the spleen, or which is best. Take *half an ounce of Steel prepared with Vinegar, infuse it in three or four pints of Wine: or if the Powder of steel* be added to the aforesaid Physick Wines.

It is thought that if you drink Wine that hath been infused sometimes in a cup made *of Tamarisk* or *of Ash,* it will open Obstructions, especially of the spleen.

Distilled waters of Smallage, Wormwood, Centaury the less, Gentian Roots, and of other the like are good either of themselves, or to drink after an Electuary.

The *Chymists* say, that a water distilled from *Vitriol* and *Tartar* and a double quantity of Flints calcined to Pouder, and burried in a cave till they are dissolved, if it be thrice cast upon the Ingredients and distilled, a spoonful will open Obstructions in the Dropsie to admiration.

Spirit of Tartar and of Salt is highly commended for old Obstructions.

Oyl of sweet Almonds if drunk doth mollifie the Hardness of the Bowels, and *of bitter Almonds* (which also opens Obstructions) *also Oyl of Olives, Linseed, Sesamine, bastard Saffron.*

Other Liquors drunk which are made by infusion *as Lyes or Lixivia,* such as are mentioned in the Dropsie Ascites, by piercing and clensing take away Obstructions.

The Urine of a Man drunk by clensing and piercing, opens Obstructions, as we said Lyes do.

Also water wherein steel or Iron is quenched as we said of steel wine.

Sharpe Vitriol waters which are Natural, if drunk cure old cachexyes, and this is usual, and is the reason why people flocks so much unto them; drinking them fasting Morning and Evening to twenty or thirty daies, rising every day a pint till they have drunk a Gallon at once if possible; by the use of which either they purge much black Matter; or if they exercise presently after they sweat much: which sweats not only that water drunk causeth cure, it frees from Obstructions, being piercing by its sharpness and gets into the Meseraiks and the Vessels of the Bowels, and carryes the Filth thereof by stool, the thinner part by Urin and sweat.

Of Meats and Sauces, that bread is best which is made with *Parsley seeds and Eggs, or Rosimary, or Fennel seed, herbs, made into Sallets of the same being boyled, with Butter and Vinegar,*

Vinegar, among the which Beets with Mustard and Vinegar is chiefly commended, Water, Parsley and Fennel Roots, the Sprigs of Asparagus, and the smalest Crops of the black Vine boiled and eaten are the like.

Pickled Cappars are used most for the Spleen.

And bitter Almonds often eaten: boiled Orobus and Lupines with Rue and Pepper, as Dioscorides.

The often use of Raysons are so proper for the Liver, that they are said to make people fat, by increasing of Blood; albeit other sweet things are hurtful to the Liver, and make it swell.

The Liver of a Wolf, Hare, Goose and Snails are also commended.

These Conserves are commended *of Succory, of Flowers and Roots of Smallage, of Flower-de-luce Roots, the Roots and Flowers of Capilar Herbs, of Wormwood, Eringus Roots, of Valerian, Sea Wormwood Leaves, the Roots of Elicampane, Broom, Elder, Dwarf-elder, and Flowers of Tamarisk.*

The Juyce of Elder, Dwarf-elder, and of Juniper Berries in the form of a thick Juyce, are given either alone, or with Electuaries, they are made by Decoction of the Juyce from divers Plants, *as of Wormwood, Juyce of Flower-de-luce, and the like of Rhaponsick, and juyce of Sowbread,* these are good when the Bowels are hard.

There are divers Pouders, some whereof which are strongest, are taken alone with Wine or other Liquor, are put into other Compositions, and are sometimes made into Trochés; of the simple Plants as *of Fern Roots, Cappar Roots, Rhaponsick, Birthwort, Ceterach, Dodder, Topps of Centaury, Wormwood.*

Some sorts of Plants are good, *as of Wormwood, Tamarisk, Broom, Agrimony and the like.*

Pouders made of the parts of Beasts, are thought to be good to strengthen the Liver and Spleen, *as the Entralls of Cocks and Wolves, first washed in wine, and dryed in an Oven, till fit to be poudered; or burnt to pouder, and made into an Anuispodium, and given in wine or water or any convenient Liquor, or with Cinnamon or other Spices, or with Diamber, Diamoscu, and Sugar of Roses, or let them be given with Conserves. The inward skin of Hens Gizards so poudered is excellent, mixed with the ashes of Crabs.*

The Liver of a Wolf poudered is accounted a proper Medicine for the Liver; and of a Hare.

The Milt of a Horse and of a Wolf, is the same.

The ashes of Cockles are good for the Spleen, with the Pouder of Linseed and Nettle seed, Goose Dung, Peacocks Dung, dryed, to which they put other things that they may not be known.

The Pouder of Steel infused in Vinegar or Wine, and Vinegar, with Sugar and Cinnamon, is excellent in Obstructions especially of the Spleen; with Sugar, Cinnamon and Goosi dung, also the Pouder of steel from a Grindstone is excellent because it is finer: or if it be washed with Aqua fortis and brought into very fine, yellow Pouder called Crocus Martis, but it must be often washed to take away the force of the Aqua fortis.

If the Steel pouder be steeped in strong Vinegar, or Juyce of Lemmons, till it be turned to rust, this is the best; or those scales which fall from a Gad of steel quenched in Vinegar.

Mathiolus commends the Quintessence of Iron.

Dioscorides commends *the Cyprus wheitstone and the Foam of the Sea hardned, also Coral.*

The usual Compound Pouders of which Troches are made or Electuaries; are the Pouders *of the Troches of roses of* Mesue or Galen. *Also* Nicolas *his pouder of Saffron, of Wormwood of* Mesue, *of Rhubarb of* Actuarius, *of Agrimony of* Mesue *and* Actuarius, *of Capars of* Mesue *and of Hartstongue and Lacca; and these Species for Electuaries, as Dialacca, the greater, of* Mesue, *and the lesser, and both Diacurcumas.*

Of these Pouders are made by taking those which are most for the purpose, and are given either with Liquor or made into Lozenges, to be kept with *Sack, Juyce of Agrimony, Wormwood or Fennel, or Endive or Syrups, or with Sugar or Honey made into Electuaries,* these Pouders are made as followeth.

The first. Take *of red Roses, two drams, of Wormwood one dram, of Cinnamon or Cassia Lignea two scruples, of Spike and Schænanth each one scruple, of Mastich half a dram.*

Instead of this you may give *the Troches of Roses* according to *Mesue,* they have the same things and are made up with *syrup of Agrimony.*

It will be better with *one scruple of Myrrhe, and half a scruple of Saffron,* of which *Galen* makes his *Troches of Roses and Schænanth.* And *Nicholas* makes *his Troches of Saffron* after this manner.

The second is; Take *of Rhubarb two drams, of Asarum Roots and Madder each half a dram, of sea Wormwood, or common Wormwood one dram, of red Roses two scruples, Annise seed one dram, Smallage seed half a dram, Spikenard one scruple:* make a Pouder.

Of these are made that *Troches of Rhubarb, of* Mesue, *with bitter Almonds, and Juyce of Wormwood or Fennel, or Dodder water, or the Troches of Wormwood* according to *Mesue* which are like *the Troches of Rhubarb,* only they want *Dodder Roots,* and have *Mastich, and Mace,* and are made up with *the Juyce of Endive, or the Troches of Agrimony,* which have *Rhubarb, Asarum, Roses and Annis seeds* as the former, and have besides *burnt Ivory, or Spodium and Manna,* made up with *the syrup of Agrimony.*

The third is; Take *of Gum Lac one dram and an half, Mastich, Bdellium or Myrrh, each half a dram, Rhubarb one dram, Madder roots, and Asarum roots each half a dram, and Birthwort and Gentian each one scruple, of Annise seed and Fennel each one dram, of Smallage and Annise seed each half a dram, of Saffron one scruple, of Cinnamon or Cassia Lignea half a dram, of Spike and Schænanth each half a scruple:* make a Pouder.

The Composition *of Dialacca major* Mesue hath the same things and besides *Costus, Savin, Hysop, bitter Almonds, Pepper, Ginger,* and may be used instead of the other. And they are made into *an Electuary with Juyce of Wormwood or Agrimony, and Honey.* There is a less *Dialacca* made only *of Lac,* Myrrh, *Bdellium, Rhubarb, Costus,* Madder, *Birthwort, Liquorish,* Saffron, *Schænanth or sweet Rush, Pepper and Honey, and the Troches of Lacca* by Mesue are made *of Lac and Rhubarb,* and a few other Ingredients. And we use these lesser Compositions safer then the great, bycause it is too hot by reason of the species; yet it is good in Dropsies.

There is also another Composition good in a Dropsie called *Diacurcuma* Mesues or *Diacrocuma,* because it hath great store of Saffron, that it may be better against the Obstructions of the Liver, especially of the Gall in the Jaundies, which Saffron doth open. This is very proper which hath somthings like *Dialacca, as Saffron, Rhubarb, Asarum, Costus,* Madder, *Anise, and Smallage seed, Spike, Schænanth, Cassia Lignea, Cinnamon,* Myrrh, and besides *Spignel, Valerian, Calaminth, Scordium, Ceterach, Parsley seed, Carrot seed, Juniper-berries, Carpobalsamum, Traganth, Opopanax, Juyce of Liquorish, Wormwood and Agrimony,* made into an Electuary.

The lesser *Diacurcuma* is made only *of Saffron,* Myrrh, *Costus, schænanth, Cassia, Cinnamon and Honey.*

The foutth Pouder, most proper for the spleen is this. Take *of Capar roots three drams, of round Birthwort one dram, of Gentian half a dram, Ceterach one dram and an half, of Broom flowers, half a dram, Agnus Castus seeds one dram, Rue seed half a dram, of Gum Ammoniack one dram;* which infused in Vinegar will make them into Troches.

Instead of this use *Troches de scolopendrio that is of Hartstongue,* which have the same, or *the Troches of Capars* according to Mesue which have also *Acorus, Cummin, Calaminth, Nigella seeds, and of Water-cresses, bitter Almonds, Juyce of Agrimony.*

Of these and other Pouders for the Liver and spleen, you may make others by adding of other Ingredients as, Take of some of the former for your turn, *one dram and an half* of *the species of the three Saunders or Diarhodon one dram,* or instead of it *of the three saunders half a dram, of the four lest cold seeds one scruple, of Ivy berries two scruples, of the ashes of the Gut*

Guts of a Cock or of a Wolf one scruple, Cinnamon half a dram: make a Pouder, give it alone or with *Sugar*; or in *Lozenges, with Sugar dissolved in Wormwood water, or Dodder water.*

I cannot pass by my cachectick Pouder by reason of the happy success it hath had in the evil Habite of Infants accompanied with a gentle Feaver, it is usual given by the shops: it is as followeth.

Take *of the Roots, and cleansed seeds of Piony, one dram, of red Roses half a dram, of Nutmeg a little torrified two scruples, of Bay-berries a little dryed by the fire half a dram, of Spike and Schœnanth, and Saffron each one scruple, of the skins of Hens Gizards prepared one dram, of opening Crocus martis one dram and an half, of the best Cinnamon one scruple:* make a fine Pouder.

The Troches of Myrrh open Obstructions and provoke the Terms, they are given alone or with other Pouders.

To these, when the stomach is distempered you may add *the species of Diagalangal, Diacalaminth,* and to strengthen it, *Diambra.*

Of these, Liquors, and Pouders and the like are made Potions, Electuaries and Pills.

Potions are made like Juleps by mixing syrups with waters, baths to prepare before purging and to alter, as *of Succory, Endive, Liver-wort, Agrimony, Dodder, Hops, Fumitory, both Bugloss, Tamarisk in the spleen.*

If there be any heat and thirst give this Julep.

Take *of spring Water three pints,* to these add *stilled waters and one quarter of a pint of Pomegranate wine, of white wine vinegar two ounces, of Sugar or Honey three quarters of a pound clarifie it for use:* and you may boil them a little.

Or make this Julep. Take *some Juyces of the aforesaid Herbs one ounce and an half, of the distilled water of the same twice as much add Sugar to clarifie and Cinnamon to aromatize it,* and you may put sharp Wine thereto.

The milk like Potion made of Turpentine, or Rosin of the Lavix-tree, or Fir-tree one or two drams dissolved in white wine, and the Yolk of an Egg, doth not only clense the Reins, but opens the Liver and Spleen, and purgeth the Belly.

There are Divers Electuaries for the same as,

In the Obstruction and Weakness of the Liver; Take *of the Conserve of Succory flowers, and the candied Roots of the same each one ounce and an half, of the Conserve of candied Roots of Smallage one ounce, of the pulp of Raisons, boyled a little, two ounces of the species of the three Saunders one scruple:* make an Electuary.

If you fear a Dropsie; Take *of the conserve of Succory flowers one ounce and an half, Conserve of Smallage roots, one ounce, Conserve of Broom flowers half an ounce, the boiled juyce of Danwort or Elder one ounce, of bitter Almonds six drams, of Melon seeds cleansed one dram, of the pulp of Raisons one ounce and an half, of Ivory, and Harts-horn shavings half a dram, Asarum roots two scruples, of Spike, and of the ashes of the intestines of a Cock, or Wolf or of Earth worms each one scruple, of syrup of Wormwood six drams:* mix them for an Electuary.

In the Distemper of the spleen.

Take *Conserve of Maiden-hair, Ceterach, and of flowers of Tamarisk each one ounce and an half, conserve of Broom flowers one ounce, the Bark of apar Roots one dram, Purslain, and Agnus castus seeds each half a dram, with the syrup of the five opening Roots, make an Electuary*; you may add *half a dram of the Pouder of steel, and after let some water be drunk* that is good against the spleen.

There is another called the *Cyphoides of Androchus* proper against the Weakness of the Liver, it may be called the Electuary *of Raisons made of Raisons, Bdellium, Myrrh, Turpentine, Honey, Wine, Calamus, aspalazon, Cassia, Cinnamon, Schœnanth, Spike, Saffron,* and some by adding *seeds of Henbane, and Opium,* make an Opiate thereof.

We make an Electuary of Raisons like it, thus; Take *a quarter of a pound of stoned Raisons, boil them in wine adding three ounces of Honey, then beat them to a Pulp, and add the pouder of Calamus, Cinnamon, Cassia each one dram and an half, Spike and Schœnanth each half a dram, of Saffron one scruple:* make an Electuary.

The Confection *of Rasis* one of Mesue, is good against Obstructions; it is made *of Rhubarb, Juyce of Wormwood, Agrimony, bitter Almonds, Fumitory, Anise seed, Smallage seed, Spike, Saffron, Cassia Lignea, Schœnanth, Myrrh and Honey.*

Also this Decoction of Mesue made *of Costus, Birthwort, Rhubarb, Asarum, Cassia Ligna, Cinnamon, Smallage and Anise seed, Schœnanth, Myrrh, Saffron and sugar.*

The Electuary of Pouder of steel by Rhasis is good in the spleen *of Myrobalans, and prepared steel, Frankincense, Spike, Schœnanth, Ammi, Honey, Ginger Pepper.*

Pills may be made of the Pouders that are unpleasant and so swallowed or a in Bolus.

Or thus, Take *of the Liver of a Wolf prepared one dram, of the ashes of the Guts of a Wolf, or Cock half a scruple, of dryed Goose, or Pigeons Dung one scruple, with the Juyce of wormwood: make a Mass.*

Let him take it often, you may add the Pouder of steel.

You may make *Extracts of bitter Juyce and so swallow them,* or towl them in Pouders if too soft, thus, Take *of the Extract or inspissate Juyce of Gentian roots, or of the Topps of Centaury the less, and of Wormwood:* mix them with the *Pouders of Asarum roots, half a dram, of Smallage and Parsley seeds each one dram, of Spike and Schœnanth each one scruple.*

When there is Hardness of the Bowels or an Obstruction *half a dram of Ammoniacum or two scruples dissolved in Oxymel, or Vinegar of Squills, or Juyce of Flower-de luce, or Briony,* is an excellent Bolus.

You may mix other things therewith as, Take *of Gum Ammoniack dissolved in Juyce of Flower-de-luce one dram, of the Pouder of Fern root half a dram, of Leaves of Ceterach and Agnus Castus seed, each one scruple, of steel prepared half a dram, of a Wolfes Liver prepared one scruple, with Oxymel or the Gall of a Bear,* (which doth excellently dissolve Hardness) make a Mass *of Pills, give two scruples at a time.*

Other Gums given as the former do the same thing as *Galbanum, Bdellium, Sagapen, and Pine Gum, also Lacca* when the Cachexy tendeth to a Dropsie, taken with *Opopanax.*

In Obstructions of the Spleen, Take *of Pine Gum half a dram, of Mistletoe of the Oak one scruple, with wax make Pills.*

Mastich, Myrrh, Storax are given also with other things also *Asphaltum or true Bitumen, and Get.*

Or these Pills may be used rather then the bitter Electuary. Take *of Myrrh and Bdellium each two drams, Saffron half a dram, Spike and Schœnanth each one scruple, with Turpentine make Pills.*

Outwardly, if the Cachexy comes from the weakness of Liver or Spleen, or from their Hardness, you must apply Medicines to the Hypochondria under the sides, if the Liver be worst to the right side, if the Spleen to the left, more backward because the Spleen lyes under the stomach and more upward because the left kidney lies under the spleen; sometimes to the whole Belly if the stoppage be in the Meseraiks, or if the Glanduls of the Mesentery be hardned, they must be such things that will dissolve Obstructions by attenuating and cutting, or if there be Hardness you must first mollifie, then discuss, choosing the strongest if the spleen be distempered, because the substance of it is more compact; adding sounthing proper to strengthen, by gentle astriction: and if there be wind, which is most usual in the left side, from the stomach rather then the spleen whose substance cannot be filled with wind, you must use things that discuss it, and strengthen the weak stomach, for which there are divers usual Remedies.

There are divers Oyntments especially in the Obstructions of the Liver. Take *Oyl of bitter Almonds, and of Spike, each one ounce and an half, Oyl of Wall-flowers one ounce, Oyl of Roses or Mastich half an ounce, Juyce of Smallage, Parsley and Vinegar each half an ounce: boyl them till the Juyce be consumed, add Asarum Roots, Smallage or Parsley seeds each one dram, of all the Saunders half a dram, of Spike*

and

and Schœnanth each a scruple: you may add Pouder *of Cypress Roots, or red Roses, and as much Wax as will make an Ointment.*

The Oyl in which the Liver of a Wolf sliced hath been boiled, used to the Liver side doth strengthen it, and help its Sanguification, and an Oyl made of the Liver of thorn black or scale Fish doth the same.

In the Obstruction of the spleen make it thus, Take *of Oyl of Capars two ounces, of Wormwood and bitter Almonds or Peach kernels, Juyce of Danwort and strong Vinegar each one ounce, of the Pouder of Birthwort Roots, Asarum and Agnus Castus seeds each half a dram, of both Spikes each one scruple, of Wax as much as will make an Oyntment.*

Or boil them in two parts of common Oyl and one part of Wine, and half a part of Vinegar, the flowers or leaves of Tamarisk, Capar Roots, Gentian, and Ceterach, and make an Oyntment.

In the Scirrhus especially in the Liver, Take *of Oyl of Lillies, Flower-de-luce each two ounces, Oyl of sweet Almonds, Chamomil, Dill or of Melilot each one ounce and an half, of Hens or Ducks Grease, the Marrow of a Calf or Deers shank each one ounce, of the Juyce of Flower de luce two ounces, of the Juyce of Smallage, or Parsley one ounce, of Gum Ammoniack dissolved in Vinegar six drams, boil them till the Juyce be consumed, and add the Pouder of Sowbread and Briony Roots each one dram, of Asarum Roots, half a dram, of Spike one scruple, of Wax as much as will make a Liniment.*

That Oyl wherein the Roots of wild Cowcumbers, Briony, Sowbread, Lillies have boiled with a little Wine and Vinegar is excellent.

If the Spleen be hard, Take *Oyl of Flower-de-luce three ounces, of Capars one ounce and an half, Juyce of Mercury, Danwort, or Elder and Vinegar each one ounce, of Gum Ammoniack dissolved in Aqua vitæ, Bdellium and Galbanum each six drams, of Opopanax half an ounce: boil them till the Juyces be consumed, add the Pouder of wild Cowcumber Roots, of Sowbread Roots, each one dram, of Asarum Roots half a dram, of Wax as much as will make an Unguent.*

Or, Take *of Sowbread Roots one ounce, of Briony Roots half an ounce, of Capar Roots two drams, of Asarum Roots one dram, of Spike half a dram, of Bay-berries two drams: bruise and boil them in equal parts of Wine and Vinegar,* Take *of this Oyl four ounces, of the Mucilage of Line seed and Fœnugreek seed each one ounce, of Gum Ammoniacum dissolved in Aqua vitæ one ounce, of Liquid Storax one dram, of Hens Grease one ounce, of Wax as much as will make an Unguent.*

The Emplaster of Ammoniacum with other Gums, dissolved in strong Vinegar, and applyed hot to the Spleen, doth mollifie the Hardness of it, and with a little Oyl of Spike it pierceth better.

The usual Oyntments for hard Bowels, and Emplasters are the Oyntment of Marsh-mallows, the Emplasters of Melilot, these will be stronger if the aforesaid Gums be added. also the Emplaster *Diachylon with the Flower-de-luce, Oyl and Gums, Ceronium, and Polyarchon, Galeni.*

Cataplasmes are used chiefly for the Hardness of the Spleen, which when we will have them soften exceedingly; we make *of Lilly Roots, Onions, Garlick, Squills, Briony, Sowbread, dragons, Flower-de-luce, Raddish, Line-seed, Fœnugreek, Colewort leaves, Ivy, Wormwood, Centaury, Elder flowers, Melilot, Chamomil, Figs, Raisons, boiled in Wine, Vinegar and Oyl, with Meal of Vetches and Lupines,* and for the spleen, *Capar Roots, Ceterach, Tamarisk;* and when we discuss, *Wood, Arsmart, wild Germander, Dogs Tongue, Nettles, Penny-royal:* boil them all in *Vinegar and Oyl,* and beat them up with the *Meal of Lupines.*

The Root of Mandrake boiled in Oyl of Line-seed, and of sweet Almonds and Vinegar is an excellent Remedy, and *Hemlock, and Henbane* so applyed, *also Lilly Roots* so boyled and beaten, to which you may put proper Gums, Oyls and Pouders.

The Spleen of a Fox or Goat applyed to the Spleen either whole or bruised, is thought good. The Blood which comes from the Vein behind the Ears doth cure the spleen, say the Antients.

The Grindstone or Fire stone or other hard flinty stone red hot, and quenched in sharp Vinegar, and wrapt in cloaths, if applyed often to the spleen will mollifie it; or if the vapor that riseth from the same being sprinkled with Vinegar be taken into the cloaths and applyed to the side, it will do the like.

The stone called *Asius* or *eat-flesh* mixed with Quick-lime and Vinegar is commended by *Dioscorides* to be apto the spleen for stoppage of the Liver: we make Fomentations thus, Take *Wormwood, Agrimony, Topps of Centaury each one handful, of Asarum Roots half an ounce, of all Sanders thirteen drams, of Spikenard and Schœnanth, each one dram, of Smallage seed and Dodder, each one dram and an half,* make a Decoction in equal parts of wine and water for a Fomentation.

For the spleen stopped, we make Decoctions *of Water, Wine and Vinegar, of Capar Roots, Ash Bark and Tamarisk, Elder, Wormwood, Ceterach, Dodder, Chamomel and Broom flowers, Tamarisk and Elder flowers, Purslain seeds, Agnus Castus, Fennel and Smallage seeds,* adding a little *Cypress rose, Spike and Schœnanth, and the Juyce of Smallage.*

For Hardness and Schirrus we make Decoctions *in wine, water and Vinegar, or Tripe Broath, of these Plants, Marsh-mallow roots, Lillies, Briony, Flower de-luce, Althæa, Elm, Mallows, Marsh-mallows, Herb Robert, Horehound, Wormwood, Chamomil and Melilot flowers, Dill, Elder, Violets Line-seed and Fœnugreek, Figs and Raisons, with Roots of Asarum and Spike,* and if you must mollifie more *the Roots of wild Cowcumber, Sowbread, Mandrakes,* if discuss more, *Calaminth, Penny-royal, Organ, Balm, Time, Stœchas or French-Lavender flowers, or Lavender,* if it be in the spleen, you must mix some of the former Fomentation, which is better, *with Juyce of Briony,* or *Flower-de-luce.*

Fomentations made for the spleen to soften it *of the juyce of Sowbread, wild Cowcumber, Smallage and Oyl of bitter Almonds, or of Capars, with wine and Vinegar, either very sharp or of Squills.*

Or if you quench Marcasites in Vinegar and wet in a cloath or piece of a hat therein and apply it to the spleen it is excellent.

Epithems are good for the stoppage and hardness of the Liver and spleen thus, Take *of Endive and of Succory water three ounces, of Smallage water two ounces, of Wormwood water, Topps of Centaury or Gentian roots each one ounce, Vinegar of Rose two ounces, all the Sanders one dram, Asarum roots half a dram, Spike, Schœnanth each one scruple.*

You may make baggs of the same and so foment.

They must keep a good Diet, beware of Pease, hard, and crude Meates, summer Fruits too much cold Water, especially if the Cachexy came from thence, and also from variety of Meates; their Meat must be seasoned with things that help concoction, prescribed in the weakness of the stomach, in regard the second Concoction doth not mend the faults of the first, and the Meat must be boiled and stuffed with things that open and cleanse, mentioned in the Cachexy, among which sugar is good not only for sweetness, but cleansing, and to be commended for one singular propriety which few observe, that is the resisting of Putrefaction. If it arise from a hot which will cause a dry Distemper in the Liver or spleen, which will easily turn to the Dropsie Ascites, you must prevent it by strengthening the Liver, and use Remedies inwardly and outwardly to open Obstructions, with things that by cooling do strengthen, especially the Liver, least they be hurt with too cold things therefore things that are hot and a little astringent and do preserve the strength of the Bowels as Spike, Wormwood are to be mixed with the cold, and if there be Obstructions we use opening and cleansing means. But if now the Bowels being hard and cleft, and the Dropsie is fixed then you must proceed to cure it as we shewed in the Hydrops Ascites, but before you must cure the Cachexy thus,

If there be aboundance of Excrements you must purge Choller especially with Rhubarb and things that inflame not the Liver choosing those things which are mentioned, in the first causes of a Cachexy.

For

For Alteration they boyl in Broath, *Endive, Divels bit, Succory, Lettice, sow thistle,* or let them be eaten boiled in salets, let them eat sharp Fruits boiled, or season them in Meate with the Juyce, *as Juyce of Pomegranates* which after working is called *Pomegranate wine,* or *the Juyce of currance, Barberries, Grapes, Lemmons, Citrons &c.*

Let the ordinary Drink be thin, white Wine dashed with boiled water, or if there be great thirst let them drink water, in which Vinegar or sharpe Juyce is mixed. The Decoction *of Succory roots,* is used instead of Drink, either alone or mixed with wine: as also the Decoction *of the Roots of sorrel, Fern, and Grass,* by themselves or with wine, which if they are made sharpe with a little spirit of *Vitriol* or *sals,* will be more pleasant and effectual,

This Julep is to be taken sometimes, Take *of sharpe Juyces one or more one quarter of a pint, Juyce of Endive two ounces, Vinegar one ounce, Rose-water two ounces, sugar* as much as is sufficient boil it into the form of a Julep, some add a little *Camphire,* which doth good rather by penetration then refrigeration.

A Physical Decoction is thus made. Take *of Endive one handful, of sorrel, Lettice, Maiden-hair, each half an handful, Tamarinds one ounce, of sharp Prunes twelve, of the seeds of Purslan, Endive, and Dodder each one dram, of the four great cold seeds two drams, of Barbery seeds one dram and an half, of Roses and Violets each one pugil:* boil them in water, adding *two ounces of Rose Vinegar,* and when it is strained put to it some syrup of the aforesaid Herbs, and as much sugar as is sufficient, and when you will make the Body loose, put *Manna* or *Rhubarb* thereunto.

The usual syrups are *of Endive and succory simple and compound, and sharpe syrups of Vinegar,* which were prescribed in the Cure of the former cachexy, to which for cooling, you may add *the syrup of the Juyce of Citrons, of Lemmons, Pomegranates and the like, as the Violets, Purslain, Water-lillies, and other of the Juyce of Currance, Barberries and other sharp Juyces.*

Waters must be mixed with *the syrups, as of Endive, succory, Liver-wort, Dodder,* with which to strengthen the bowels we mix *water of Agrimony and Wormwood.*

Pouders of species, which are given by themselves, or *in Troches, Lozenges, Electuaries, Pills* may be used as followeth, of which this is excellent to open Obstructions. Take *of red and white sanders, each one dram, of yellow sanders half a dram, of red Rose leaves two drams, of Violets half a dram, of the four great cold seeds one dram and an half, of Purslain and Endive seed each half a dram, of Antispodium, of Ivory shavings two drams:* make a pouder and *with Gum Traganth dissolved in Rose-water or Juyce of Barberries make Troches,*

If you add *Rhubarb and Camphire* it will be like *Diatrisantalon Nicolai;* which hath besides the things herein, *Juyce of Liquoriss, Gum Arabick and starch,* and sometimes the *Rhubarb* is double in quantity: and this usual composition may be used for the former.

There is another Composition of more Vertue, called *Diarhodon Abbatis Nicolai* used against Obstructions, which is less hot, it hath in it *sanders, Roses, Violets, the four great and little cold seeds, burnt Ivory, Gum arabick and Traganth, Juyce of Liquoriss, Rhubarb and Camphire, as Diatrisantalon, and besides Asarum, Bar-berries, Anise seeds, Fennel, Basil seeds, Poppy-seeds, Mastich, Saffron, Spike, Cardamoms, Lignum Aloes, Cloves, Cinnamon, Musk, Pearl, the Bone in the Heart of a Hart or stag.*

The Troches of Diarhodon Nicolai, of Roses, sanders, burnt Ivory, saffron and Camphire, are not so large as the former.

And the Troches of the sanders which are more binding, they have *sanders, Roses, the great cold seeds, Purslain seeds, Bar-berries, burnt Ivory, Camphire, and Bole Armenick.*

Or other astringents *as the Troches of Bar-berries,* instead of which we may use these less binding, Take *of the three sanders, add Roses each one dram, of Rhubarb one dram and an half, of spodium, of Ivory one dram, of Endive, Purslain, and sorrel each half a dram, of Melon seeds two dram and an half, Camphire one scruple; Sugar and Manna two drams:* Make a Pouder with the infusion *of Gum Traganth in Endive waters;* Make Troches,

The Pouder of the leaves of Endive and Succory taken often in Wine, with the seed of *Hatch-vetch* and a little Cinnamon to make it pleasant, is approved.

Also Lozenges made of these ordinary pouders Diatrisantalon and Diarhodon, and of other things with the conserve of Succory flowers.

We make of the Juyce of Bar-berries pleasant Lozenges which allay the Heat as, Take *of the Juyce of ripe Bar-berries, three ounces, of Sugar one pound, as much water of Endive, or Roses* as will boil them into a consistence for Lozenges.

Thus are made the Lozenges of the Juyce of currance, Pomegranates, Lemmons, citrons, and they are as good as the former.

Of these conserves, and Pouders may divers Electuaries be made as, Take *of the Conserve of Succory flowers, and the candied roots of Succory each one ounce and an half, of Conserve of Violets, Maiden-hair and Bugloss each half an ounce, of Melon seeds one dram and an half, of Trisantalon one dram, with syrup of Sorrel,* make a moist Electuary, or make it thicker with sugar of Roses.

Some give Opiats to cool the Liver but to no purpose being hot things are therein, as Philonium.

Vitriol waters drunk for some weeks as we shewed in the cure of the former cachexy, besides other benefits there mentioned, do cool the Liver, if they be taken in time before the Dropsie be great, and while the water is only in the Belly and Feet, but when it gets out of the Veins it wil increase it, especially (as is usually) if they make little Urine, and Drink much; therefore it is better for those Drinkers who by their continual thirst shew the heat of their Liver, before the cachexy grow great, to mix their wine with water.

The heat of the Bowels and especially of the Liver, and the dryness also is cured by outward things that cool and moisten; adding alwaies those things that are astringent as these following.

A cooling and moistning Oyntment. *Take* Oyl of Violets, Lillies, Guords, or of Oliers, washed in Vinegar or Juyce of Endive, two ounces, Oyl of Quinces, Roses, Myrtles, or Mastich, each one ounce; of the lesser cold seeds, and of Sorrel and Rose leaves each half a dram, of al the sanders one dram, of spike one scruple, camphire half a scruple, Wax as much as will make an Unguent.

These are more proper for the Liver. *Take* of Oyl of Roses and Violets, each one ounce and an half, of Oyls of Water-lillies and Wormwood, each one ounce, of the juyce of Endive one ounce and an half, of the Juyce of Agrimony, one ounce, of Vinegar of Roses six drams: boil them till the Juyces be consumed, and add red and white sanders each one dram, of Endive, Purslaine each half a dram, of spike one scruple, of Wax as much as wil make an oyntment: to these add camphire, or Troches of camphire.

The Oyntment of sanders is usual against the Distemper of the Liver, which is made of the three sanders, Roses, spodium, Bole Armenick, camphire, Oyl of Roses and Wax.

Also Oyl of Roses made of Roses and their Juyce and Oyl of sweet Almonds: to which some add Opium which because as we often shewed that it doth not cool, will do no good in that respect, but if there be hardness it wil mollifie, as we have shewed stupefactive things do.

You may also use *Refrigerans Galeni* with spike, you may also apply an Epitheme to the Liver, made thus, *Take* of Endive, succory and Liver wort water each three ounces, of Violet-water, or Lettice or Nightshade, and Roses each two ounces, of Wormwood water, one ounce, of Rose Vinegar, of sour Wine, one ounce and an half, of all the sanders each half a dram, of spike one scruple, of camphire half a scruple: mix them. Juyces of Endive and succory may be added, also Waters of sorrel, sinollage, and

Dod-

Dodder, pouder of Purslain seed, Endive, Smallage, and red Roses seeds, burnt Ivory, and Mastich, of because the stomachs being so near to the Liver.

A Fomentation may be made with the Decoction of ordinary or stilled proper Water, and Rose Vinegar or wine, with Endive, Succory, Wormwood, the four great and small cold seeds, with Cypress, Spike, and Schænanth, and other Pouders mentioned.

Or these mentioned, boiled in a bag and strained, and applyed. Also these Pouders of cold seeds, Violets, Roses, Water-lillies, Spodium, and Spike tyed in a clout, and sprinkled with proper waters and Vinegar.

Purslain new gathered and beaten with Rose-water, and Vinegar, with Camphire is fitly applied.

Or a Cataplasm of Barley meal, or of Lentils made thick with Juyce of Endive, or Purslain, and Oyl of Roses.

In their Diet let them take heed of strong wine, sharpe Meat, spiced, or salt, let them eat moistning Broaths rather and flesh such as were prescribed in the Treatise of Hectick Feavers, to correct the dryness of the Liver, which is difficult when fixed.

The Cure of the Jaundies.

That Jaundies which comes from Choller, in which the whole Body is dyed; if it come from much Choler without any other Infirmity joyned, in regard Nature doth disburden her self by an inconvenient way you must bring the Choller back into the Guts; and this must be done when there is a Feaver also adjoyned. But if it follow a Feaver, and cureth the Feaver by sweating, you must help this Motion of Nature rather than hinder it. In other Diseases joyned with the Jaundies, you must consider these Diseases chiefly, alwaies purging the Choller forth by proper waies, and drawing it back by stool and Urine, but if the separation be hindered by reason of the Obstructions of the Liver, Hardness, Scirrhus, Rottennss, from whence cometh a Dropsie, or if there be Inflammation, you must cure it with consideration of these; if the Excretion or voiding of Excrements be by reason of the Obstruction of the *Porus Cholidochus*, we apply the same things which we use in the Obstruction of the Liver, and if there be Inflammation the same.

If the Jaundies proceed from Poyson taken, this must presently be voided by Vomit, Glisters, if from a stroak or bite of a Beast, you must use things that draw the venom out, as Cupping-glasses and the like, and give things that resist venom, Antidotes and the like, of Harts-horn and Ivory, which also cure the Jaundies; and if the Colour which is but a symptom remain after the cause is removed, we take it away with Topick Medicines.

Blood-letting is good if there be much Choller in the branches of the *Vena cava*, and nothing else hinder, because it takes away part of it; which when the blood is cold, will be seen by its yellow water.

Some to little purpose open the Veins of the Fore-head, and under the Tongue to take yellowness from the Eyes and Face.

Otherwise, when there is not much Choller in the veins, Blood-letting is of little profit in the Jaundies, except there be some other Disease that requires it, for when the *Vena cava* is emptied, the meseraik Veins send blood and Choller the easier up into it. And this is to be understood in the provoking of Terms; for these come from the *Vena cava*, and if they be stopped in the jaundies as in a Cachexy, they will not be provoked by Blood-letting, except the jaundies be first cured, because the stoppage of them comes from the jaundies, not the jaundies from them, as we shewed.

The Hæmorrhoids, because they purge both Choller and Melancholy from the Meseraiks, if they bleed of themselves, or by constraint, are profitable.

Glysters are excellent when the Choller cometh not to the Guts to provoke stools, nor discoloureth the Excrements: for by forcing they do not onely fetch out the Excrements, but by stirring up Nature, and opening, they fetch Choller from the Meseraiks and the *Porus Cholidochus*.

Therefore first give emollient Glysters, then sharpe, and such as purge Choller, (mentioned in the Colick and in Feavers) adding things that open, as Roots and opening Herbs: after use the strongest, if the other prevail not, vomiting is good sometimes, especially if it come from Poyson.

General Purges for carrying Choler out of the Meseraik Veins where it is first gathered together, and sent to the other Veins from thence, are good; these may be only such as purge Choller, if choller alone can be purged by them, but in regard things that purge Flegm do the same as Experience teacheth, we must not stand much upon that, so long as Obstructions are opened which are the cause, many such Purges are prescribed in the Cachexy that comes from the Liver, and may here be used, and to which these may be added.

Very bitter things are used to cure the Jaundies which come from Obstructions, because they do not only open obstructions, but also they open the Mouths of the meseraik Veins, that the choller which cannot go to the Guts by its usual passages, may go that way back again and so may not be brought too much into the hollow Vein; therefore they give Aloes, both in form of Pills, as Pills of Hiera with the same quantity of Rhubarb, and Agarick, that they may purge the better, or mix stronger with them, as Pills of Rhubarb, and Aggregative.

Or give these like then approved by *Galen*. Take *of Aloes half a dram, of Epithymum, or Senna, or Polypody one scruple, of Euphorbium, and Brimstone each half a scruple, with wine or water make Pills.*

Hiera picra is given for the same end in a Potion, and it is best in the Jaundies, and to kill Worms, which sometimes by reason of the want of choller in the Excrements, being they are then less bitter, grow there.

Take *of Hiera picra simple*, (in which is *Saffron* which is thought to be proper against the jaundies.) *one dram and an half, of Rhubarb, and Senna each one dram, of Mechoacan half a dram, of shavings of Ivory, and of Harts-horn, each one scruple*: make a pouder, give *one dram with Whey or Wine*, and if you add *one scruple of Diagridium*, it will work the better.

Hiera Coloquintidos given instead of the other, by reason of the double Bitterness of Aloes and Coloquintida will open the passages more violently, and stir up Nature; and therefore they give Wine infused in the Apple of coloquintida made hollow, or the like.

The Extract of Aloes Rosate with Rhubarb is chiefly given in a jaundze as a purge, the preparation whereof we shewed in the pain of the Heart, from weakness of the Stomach, or this, Take *of the essence of Aloes* prescribed in the Chapter mentioned *three ounces, of the pouder of Rhubarb sprinkled with Cinnamon water one ounce, of the Extract of the same six drams, and with Syrup of Wormwood* make a Mass for Pills.

Potions are made of catholicon, Diaphœnicon, of the Electuary of the juyce of Roses, Diaprunis, Diapsyllium, dissolved in Wormwood water, or the like, adding proper Syrups.

The Electuary of Sowbread purgeth and sweateth.

Potions are made of the infusion of Rhubarb, with spike, and cinnamon in wine or water, of Troches of Agarick in Honey with water, Syrups and Electuaries aforementioned, with purge.

Or of a preparing Apozeme, with Polypody, carthamus and Senna, in the Decoction, and then with Rhubarb, Myrobalans, and Agarick infused make a purging Apozeme for some daies.

Or the Aggregative pills, or pil aureæ alone or mixed with Pills of Rhubarb.

Sweating doth send the choler with the Serum or Water from the branches of the gate Vein, and also takes away that which was in the skin by the Pores, which maybe good

after that Choler which was in the Meſeraiks Veins, and cauſed the Jaundies, firſt is purged away, leaſt it be by ſweating carried into the Veins; and it is done by Baths and other things mentioned.

It is good alſo to provoke Urine, to bring Choler out that way, which otherwiſe uſed to colour the Urin, and is often plentifully ſo voided: which is done by things that open obſtructions, and better if Diureticks are added thereunto, Thus,

Take *of red Vetches, one pugil; of Melon ſeeds one ounce and an half, of Fennel ſeed two drams, of Dodder ſeed, one dram, of red Sanders one dram and an half, of Spike, and Aſarum-roots each one dram*, boil them in convenient ſtilled water, till there remain *one pint and an half*, Take of the ſtrained liquor aromatize it with cinnamon, and yellow Sanders and ſweeten it with Sugar, for ſome Doſes.

You may uſe things that alter before and purging to prepare and open Obſtructions, and to diſſolve Tumors, if ſuch be in the Jaundies, many of them are deſcribed in the Cachexy, and they that are good for the Liver in the like caſe may be here uſed in the jaundies, the cauſes being obſerved; chooſing ſuch things as heat not over much and breed choller; beſides which theſe following are proper for the jaundies.

Decoctions made in Water or water and wine, and Vinegar are made divers waies to be drunk three or more Mornings together: as thus of many things, which may be alſo made of few.

Take *of the five opening Roots, of Dock-roots each half an ounce, of Orris roots, and round Birth-wort, and Aſarum each two drams, of Tamarisk barks an ounce, of Succory, five leaved Graſs, Dropwort, with the Roots, Groundpine, Germander, and the Capillary Herbs, of Endive, Liver-wort, Agrimony, and Dodder, each one handful, of the Topps of Wormwood, Roſemary, Horehound, and the greater Celandine, each half an handful, of Elder flowers, and Broom flowers each one pugil, of red or black Vetches one pugil, of the four great cold ſeeds, each one dram, Aniſe ſeeds half an ounce, of Caraway ſeeds three drams, of Parſley, and Turnep ſeed each one dram, of Prunes and Figs each five pair*: boyl them in water and wine, in the Liquor ſtrained being one pint and an half, diſſolve Sugar as much as fit, and aromatize it with Cinnamon, caſſia lignea, Spike, or Sanders for an Apozeme for four or five Doſes.

Beſides theſe the Decoction of wild Flax, St. Johns wort, Samphire, Penny-royal, Organ, Polymountane, wild Mints, wild Marjoram, Ground Ivy, Chamomil, Fleabane and its flowers, and the Roots of Alkanet, Hog Fennel, and Perewinkle, or Swallow-wort, Eringus, Carduus, and Aſh barks.

Alſo the Decoction of Celandine Roots, with Elicampane, Oak Moſs, and Saffron.

If theſe ſimples be ſteeped in Wine, and then the Wine given at ſeveral times it will work more ſtrongly.

Or make this wine, of Succory, Fennel, and Aſparagus Roots each ſix drams, of Aſarum Roots three drams, of Horehound, Wormwood, and the leſſer Centaury dryed each two drams, of the Tops of Roſemary one pugil, of Lavender flowers half a pugil, of Indian, and Celick Spikenard, and Schænanth each half a dram: ſlice them and put thereto three pints of white Wine, add two drams of Rhubarb to make it purge, and if you add two drams of ſteel it will be admirable.

A ſimple Wine in which half an ounce of Aſarum roots, or ſteel hath been infuſed is good, *Dioſcorides* commends Squill wine; ſome ſteep the fore Teeth of a Beaver in wine and drink it.

Another is made thus; Take *of Sarſa two ounces, of Fennel, Parſley, Burnet, Orris, and Rhapontick roots each half an ounce, of Elicampane two drams, of Gentian, and Aſarum roots, and Pellitory of Spain each one dram, of Agrimony, Wormwood, Dodder, Horehound, Germander, Groundpine each half an handful, of Tops of the leſſer Centaury one pugil, of Aniſe, Fennel, and Smalage, Senna each one dram, of Cinnamon* and Galangal each one dram and an half, infuſe them in eight pints of white wine, if you add Turbith two drams, Rhubarb, and Agarick each three drams, of Ginger half a dram, it will alſo purge.

Theſe alſo may be boiled in water and wine, with or without the purges, and ſo taken ſome commend a diſtilled water of the ſame taken two ounces and an half at a time.

The juyces alone drunk from one ounce and an half to two ounces, with ſugar and wine is good, eſpecially the juyces of five leaved Graſs, Dock-roots, dead Nettle, Horehound, Lemmons, Sowbread, Succory with the Roots, or you may make them of ſuch Plants as are good by Decoction; *Mathiolus* gives the juyce of Cowcumbers, Raddiſh water is highly commended in the Jaundies.

Other Potions are made of divers things, as of pouders with wine, and water, ſyrups and Decoctions; the more ſimple are the pouder of Orange peels, Ivory ſhavings, ſteel, Earth-worms, the ſtones in the Gall of an Ox, and Brimſtone which *Dioſcorides* gives in the Yolk of an Egg.

A Pouder may be made of many things thus,

Take of the Roots of the greater Celandine, and Swallow-wort, and Madder each two drams; Roots of Gentian, Birth-wort, and Aſarum each one dram; of Wormwood, Horehound, Vervain, and Maiden-hair, of Broom flowers, carthamus, Roſemary, of carva ſeeds, Endive, Germander, and columbine ſeeds each half a dram; of ſhavings of Ivory, and Harts horn each one dram, of ſteel prepared with Vinegar one dram and an half, of dried Earth-worms one dram, of cinnamon, Nutmeg, Mace, Spikenard, each half a dram, of Myrrh. Maſtich, and Frankincenſe each one ſcruple, of Saffron half a ſcruple: make a Pouder, give one dram or more, with ſugar, or without, with wine or other convenient Liquor.

This Pouder is bitter but excellent. *Take* of Gentian Roots one dram, of the Tops of the leſſer centaury, Orenge peels, Ivory, and Harts horn, ſhavings of Cinnamon, each half a dram: make a pouder, give one dram in wine or other Liquor.

Theſe Troches are good in a jaundize that tends to a Dropſie, *Take* of Rhubarb two ſcruples, of Aſarum roots, Gum Lac each half a dram, of cinnamon, Spikenard, ſchænanth, caſſia lignea each one ſcruple: make them in Troches with juyce of Wormwood, or Agrimony, or Triphera Saracenica, give it in wine or water.

The uſual Pouders to open Obſtructions, are of the troches of Rhubarb, Agrimony, Wormwood, alſo Trionſantalon, Diarrhodon Abbatis, Diacarcuma, Dialacca, in which ſometimes Rhubarb is doubled in quantity, they are given alone or mixed with wine.

That Pouder which ſome commend ſo highly in the Jaundies which they divide into three parts, and give at three Mornings together, in the Decoction of Vetches is this,

Take of columbine ſeeds, Harts horn, and eaſtern Saffron each one dram: make a fine pouder for three Doſes.

There are Potions made of cray fiſh beaten with celandine and water, and then ſtrained, five ounces of the urine of a Boy drunk often doth it by Experience, with ſugar or Honey to ſweeten it.

Others boil Gooſe dung in water or wine, and ſtrain it, and give it to be drunk.

Cummin ſeed eaten preſently after bathing is approved. And this the German Women uſe ſtill, and beleeve it to be of great force; *Dioſcorides* gives May-weed after bathing, its yellow flowers, I ſuppoſe.

The Leaves of Sage often drunk have cured ſome, and the Leaves of wild Rocket often eaten.

Others beleeve that eleven Lice drunk down will cure the jaundies.

This Electuary is convenient. *Take* of the conſerve of the flowers or Roots of Succory, of Maiden-hair each one ounce, of the conſerve of Smallage Roots, Orris, Orange peels each half an ounce; of ſhavings of Ivory, and Harts-

horn

horn each one dram and an half, of the usual Pouders one dram: make them into an Electuary with some of the aforementioned syrups, let him take a Bolus and drink the Phisical Wine or water after it.

It will be of more force if you add to this Electuary *two drams of Bitter Almonds, one dram, of the great cold seeds, of Rhubarb one dram, of Steel prepared two drams, of Pouder of Earth-worms half a dram, of Saffron one scruple and an half, Cinnamon, and Nutmeg each half a dram, and with Oxymel of Squills make an Electuary.*

The Pills of simples which are hard to be taken by Reason of their evil sent and taste in pouders, are made thus, Take *of Gentian roots, Birthwort, Madder, and Rhubarb, and Myrrh, each half a dram, of steel prepared one dram, of Hogs dung dryed one scruple, of Saffron half a scruple:* mix them with juyce or syrup of Wormwood, or of Horehound, and make pills. The Dose is one dram.

And the usual Pouders may be so made into Pills.

Outwardly Medicines are applyed to the Liver, if that cause the jaundies, either by Obstruction or Hardness such as are mentioned in the Cachexy, also Oyntments, Emplasters and Fomentations, which need not be repeated being there mentioned.

To other parts of the Body which are discoloured Remedies may be used, as Baths, for taking away Choler that remains over the Body after the cause is removed, and will not breath it self forth, as at other times. And they must be dry when we intend to sweat: with Flax aired with *Elder* and *Juniper burnt*, also they must take an inward Sudorifick before bathing.

Moist Baths are made by boyling these following to cleanse and discuss, *as Pellitory of the Wall, Beets, Mallows, Marsh-mallows, Soapwort, Centaury, Wormwood, Horehound, Fumitory, Chamomel, Sorrel, Elicampane, Melilot, Rosemary, Organ, Misleto of the Oak, the greater Celandine, golden Flowers*, which three last having yellow juyce, are thought to be proper against Choller, *with Beans, Lupines, Bran and Barley.*

Waters to wash with are used at the comming forth of the Bath: made of cleansing Herbs.

For the face which is most visible, to recover its colour, it must be washed in the Bath, and after with this Decoction or the like, *with Wine, Vinegar, Water of Roses, Beans or Sorrel, or with the Juyce of Pomegranates, Lemmons, Citrons, or Syrup of Sorrel, Vinegar dissolved in waters or Decoctions.*

To take away the yellowness of the Eyes, waters must be dropped into them, *with the Juyce of Pomegranates, or wine and water, or Juyce of Coriander.*

You may put into the Nose things that by neesing disperse choller, from the Face and Eyes, anoynting the Nostrils within with Scammony, which because it attracteth Choller is made choice of, but we use it because by Experience we find that it provokes Neesing, mixed *with Honey*, but *Elaterium* mixed with Milk doth it more violently, other Errhines do it more mildly, *as the Juyce of Horehound, white Beets, and Gith seeds*, and the Decoction thereof.

Also the Sent of *Nigella* or *Gith* when it is eaten, and of Vinegar do the same.

Rubbings after bathing and otherwise are good to take away the Reliques of choller from the skin.

Applications made to the soles of the Feet, have been cryed up by the vulgar, as the greater *Celandine* and *Misleto of the Oak*, whole, or bruised with *Horehound* somtimes wine and Vinegar, and salt, and these applyed to the wrists work more speedily.

One told me for a certain truth, that many have been cured of the jaundies by pissing upon new made Horse dung while it is hot.

Let the Diet be proper: let the Drink be thin, white wine mixed with the Decoction of Roots of Grass, and Asparagus, or other openers, and let other things be answerable.

The Cure of Redness. That Redness which comes from Blood, which is chiefly in the Face, if it be either from Bashfulness or Anger, as it quickly comes so it goes away with the passion. And that which continueth long, which either comes from external Heat, or a Disease, hath no cure but by abating the Heat.

The Cure of Paleness. Paleness if it be from want of blood, by the loss of the flowrishing colour only, and from cold, it will continue only while the Body grows hot, as that which comes by fainting returns afterwards; and that which comes from a Disease, will cease with the Disease, and there is no peculiar Direction for it.

Blackness. Blackmoors. That Blackness which is Natural and comes from the seed, if it be like a Blackmore, to go about to cure it is to make a black More white according to the Proverb, which is impossible.

Ordinary Swarthiness, the Cure of it. There is another vulgar Swarthyness, when the skin is darkish and dusty Naturally, is nothing set by, of them who think true Beauty doth not consist in whiteness, and therefore they think a Man is not discoloured thereby, and will not require cure.

But such as love to be neat, and think themselves less fair, and acceptable to others thereby; desire to mend it if they cannot cure it.

When the skin is black by wrinkles that shadow it, and make it dark, when the wrinkles are not confirmed, as when they come from an external cause or Disease that hath made the skin loose, when the causes are removed they will cease and the skin will be stretched and its wrinkles and return to its former Complexion; but if the skin be dryed and straightned especially by Age as in old people, though they seem impossible to be taken away, and the Physitian that permiseth to do it seems to be mad, as the Poet saith,

He is worthy of a filthy aged Queen,
That wrinkles from her body taketh clean.

Yet for the taking away if not diminishing of the same, there are Remedies, which old Men desiring to seem yong do much affect.

Medicines by the beautifying Art. These are done by a two fold Art, by one called comptorian Art which is for Neatness, making an artificial white, but instable and fading over the black which is Natural, so deceiving the Spectators, and this is called a Fucus; the other is called the cosmetick art, and doth not add another colour nor deceives, but only amends this dull colour of the skin, making it more neat, bright, and constant in colour, taking away or mending the wrinkles, and correcting the dark complexion. Afterwards that there may be more Beauty, with red colour applyed to certain parts called then *Fuci*, by the comptorian Art, they make the Body of better colour. We shall shew how this is done by Remedies that whiten, clense, take away wrinkles and make red.

Fucus.

Medicines made by the Cosmetick Art.

The white Medicines called Fucuses, with which women that affect to be beautiful (and which would be unseemly in Men,) do paint their Face, Hands, and other places that are naked and seen, are made of white stuff, and that is chosen for the most part which is cleansing and digesting, or such things are mixed therewith: for so they make fair not only by whiting which is but of final continuance, and little Ornament, but maketh a new colour in the skin, by sucking continually forth that Moisture which makes it black: and it attenuateth the skin by clensing, and so makes it more clear and neat. And therefore when the skin is thicker and harder then usual, softeners are mixed, not only to procure a decent colour, but to mollifie the Hands and Face which is commendable, for which cause that the Face may alwaies shine, which is accounted comely, they add some fat things.

These paints being thus made in form of a Liquor white

as Milk or of an Unguent muſt be applyed and ſuffered to dry on. And if they be diſcoloured by their thickneſs which women of the honeſt ſort do fear exceedingly, before they go forth do uſually waſh with ſome comely decoction, which is no paint, as ſhall be declared, ſo gently that ſome of the white ſtill remain with, and that when the paint ſeems to be quite gone will reſtore it, and it will continue long, and therefore they waſh often after it, before they go forth into view.

The matter of theſe is taken from divers white things as follow, of Ceruſs, which being very white, and ſticks well by reaſon of its fineneſs and Fatneſs, is proper, if firſt it be poudered and ſeifted, waſhed often, and dryed; or boiled in water till it may be made into Troches, one whereof being taken in the palm of the Hand with a little convenient Liquor, will ſerve to paint the Face.

Of the white Dragon Roots there are made Troches as the former, like Ceruſs and white Starch, called *Gerſa*, which beſides the whiteneſs it makes, doth cleanſe very much, and it is made of the Juyce of Dragon Roots, dryed gently by the fire or Sun, and ſo brought into Balls or Troches.

Or take the Roots aforeſaid, and after they are cleanſed beat them, and then with warm water or other convenient Liquor diſſolve it, and ſtrain it and ſo let it ſtand till there be a white cream at the bottom; from which pour of the water at the top, and pour on freſh, which after a little time you muſt alſo pour off from the reſidence at the bottom as before, and this being three or four times done, let that which remains be dryed, and made up for your uſe into ſmal Troches.

The common way of preparing this Gerſa is of the dryed Roots of Dragons, which being firſt peeled from their external black coat, muſt be beaten into pouder, and then diſſolved in water, and gently dryed again, and then again poudered, and waſhed after this manner three or four times, and made into Balls or Troches, and kept for uſe.

The ſame way may be made as well of the great Aron, or Cookow pintle Roots, in defect of the other, as white and as forcible, or of both together.

Of the white Brittle root, of the wild Cowcumber you may alſo make the ſame.

You may make other forms of Dragon Roots and Ceruſs thus: Take *of Dragon, Gerſa prepared as before one ounce, of Ceruſs prepared, of Borax two drams,* and if you pleaſe *of Camphire half a dram, with the Infuſion of Gum Traganth made in Roſe water, make Troches* for your uſe; you may mix ſome things that are in *Unguentum Citrinum* therewith.

Sometimes you may mix prepared *Ceruſs and Dragons with Oyl of ſweet Almonds or de Ben,* and a little white, if you pleaſe to make it into an Oyntment.

Of ſublimate Mercury there are excellent waſhes made, which cleanſe and make white, which are divers waies prepared leaſt they ſhould exulcerate, mixing things which work the ſame effect more gently; and leaſt any part of it ſhould touch the Teeth and make them black, as is uſual, ſhe muſt keep water in her Mouth while ſhe uſeth it.

A water like Milk is made thereof, which is more plain and profitable, thus: Take *of finely poudered Sublimate half an ounce, two or three whites of Eggs well beaten, of the Emulſion of white Poppy ſeeds made of one pound of the ſeed and ten pints of water,* ſtir them very well in a ſtone Mortar, firſt putting in the whites of an Egg by degrees, then the Emulſion, as is ſufficient which is known by a Pin, or put therein for when it is not diſcoloured after ſome continuance there it is right, but if it be then pour on more Emulſion.

To this we add *two ounces of Borax, or of Sugar Candy.*

Another white waſh is thus made: Take *of the whiteſt Barley flower, or Starch made into a paſt with Goats Milk, bake it gently in an Oven and when it begins to be hard take it out, and mix it with ſo much Goats Milk, as will make it all like thick Milk, take five pints of this, and two drams of Sublimate, mix them well together, more or leſs, till by the proof above mentioned with a pin you find it right, then uſe it, adding ſometimes Ceruſs one dram, Borax two drams, of ſea Snails calcined half an ounce, with a little Camphir.*

A dry paſt made of Sublimate, like Chalk or Starch is often uſed; a portion whereof being tempered in the hand with a little wine out of your Mouth, or Roſe-water, may anoint the Face: or mingled with *Pomatum, Oyl of Guords ſeeds, or ſweet Almonds,* it is made thus,

Take *of Sublimate poudered one ounce, of Quick ſilver two or three drams, of Juyce of Lemmons, or Vinegar a little,* ſtir them till they wax white, and then ſtir them well faſting, ſpittle of one that cheweth Sugar Candy, then with whites of Eggs ſtir them into the form of a paſt or Liniment. Then waſh it with a good quantity of Spring water, and let them boil together a little, and then ſtand to ſettle, and let the clear water at the top be poured off by degrees, and freſh water be poured on, and then after boyling and ſetling be poured of as formerly. Do it thrice, but the laſt time with Roſe-water, or Bean-water or of Myrtles, and boil it till it be almoſt conſumed and let the bottom or reſidence be ſet in the Sun or in an Oven till it be dry: ſometimes this infuſion is made without boiling only by long ſteeping, and changing the water ſometimes, and then drying the reſidence.

Sometimes *a dram of Camphire* is added to the ſublimate and Quick-ſilver, the quantity of a dram, and to make it more dear, rather then for profit, as much of the pouder of Pearls, or ſea Snails calcined, with ſome Leaves of gold and ſilver, to repreſs the malignity of Quick-ſilver, and of ſublimate.

There is the like made by the women of *Monpelier,* which is, Take *of the beſt ſublimate four ounces, of Quick-ſilver mixed with the faſting ſpittle of one that chewed Sugar Candy half an ounce: beat them well in a ſtone Mortar, with a wooden Peſtil, till it be white; then tie it in a white ſilk Clout, and put it into a new glaſſed earthen pot full of water, and ſet it upon the Embers, and after the water is grown hot, pour it off, and add freſh, and do ſo the ſecond time, and let your Mercury be ſweetned with ſo doing nine times, and let the Body that remains in the ſilk Rag be dryed and made into formes as big as Vetches, dry them in the ſhade and keep them for uſe.* The way is to take one piece and diſſolve it in *Oyl of ſweet Almonds* for a Liniment for the Face.

There is a white waſh made of Litharge, by ſteeping or boyling it, which they call Virgins Milk, this gives the Face a good Colour, but becauſe it doth take Redneſs away too much, we ſhall ſpeak of it hereafter, in Redneſs.

Waſhes may be made alſo of Borax, which the Goldſmiths uſe, and is made of water, being finely poudered and mixed with Oyl of Guord ſeeds or other Oyl.

Or with the Infuſion of *Gum Traganth,* to anoint, and you may mix *Ceruſs with Borax.*

Of ſtones as white Marble, Alabaſter, Amiantum, ſpecular ſtone, Loadſtone, which is called Talcum, Cryſtal; white Coral, and divers Sea-fiſh ſhells either crude or firſt calcined, made up with Oyl, Liquor or Pomatum, are made alſo Oyntments, and theſe Waſhes, as: Take *of ſome of the aforeſaid half an ounce, Ceruſs two drams, Borax one dram, white Frankincenſe, and Camphire, each half a dram, of Juyce of Lemmons one ounce, of Oyl of ſweet Almonds or other Oyl as much as will make a Liniment.*

Or let her uſe inſtead of theſe *the Unguentum citrinum which is made of the ſtones aforeſaid, Alabaſter, the ſpeculier ſtone, or Talcum, Chriſtal, Coral, and ſhells, the Navel ſhell Fiſh, the purple Fiſh, the Trumpet Fiſh, Ceruſs, Borax, white Frankincenſe, Camphire, and Gerſa of Dragons, Niter, Starch-Traganth, Hogs Greaſe, and Hens Greaſe, and the Juyce of Citrons, from whence this Oyntment is named Citrinum.*

The Face or Hands being rubbed with the fine Pouder of Talcum, it makes them wonderful white, ſo that if it continue any time, it will not eaſily be taken off.

Eggs ſhells calcined and poudered finely, make an oyntment with the things mentioned, alſo very excellent. Alſo a good Oyntment is made of Starch incorporated as before

fore, and you may add the white flower of dryed *Melon* and *Pepon-seeds*.

Also an Emulsion of *Melon-seeds* and *Almonds* with their water, doth beautifie the Face.

Some Women use it thus. They take one or two *bitter Almonds* and put them in a Clout and chew them fasting, and so anoint the Face with the Spittle mixed with the white Emulsion.

Those cleansing Remedies external, which differ from a *Fucus* only in that they paint not white, are made as the other, and are as follow, with which the Face is to be washed or anointed.

Stilled Waters are most usual, as of these Simples, *Solemons Seal, Bean-flowers, Roots of Dragons, or Cuckow-pintles, Sowbread, Raddish, Gentian, Mallows, Lillies, Mullein, Water-lillies, Melons, Kidney Beans, Pine-nuts, with sweet Waters, as of Roses with Musk, or Camphire, of Orenge flowers, Orris Roots &c.*

The Waters of Lillies, and Rosin of the Fir-tree, doth make a thick Skin thin.

Many Compounds are for the same use, thus made, of *Gourds, Melons* being ripe and divided, distilled with *Goats Milk, and Eggs* beaten together.

Or *of Lemmons, Oranges, Citrons, distilled as the former.*

Another is made of Bread thus: Take *of common white Bread, or of Barley, or Bran, the Crust taken off two pounds, of Goats Milk three pints, of Eggs beaten ten, distil a Water of them.*

You may add *three ounces of Sugar, and so distil it.*

Or *half a pint of Wine, and one or two Lemmons, or one ounce and an half of the Juyce, and one dram of Camphire.*

Or, Take *the aforesaid, and add of Bean or Pease Meal, or of Rice three ounces, of bitter Almonds, two ounces, of the four great cold seeds one ounce, distil them.*

That it may cleanse more, add of *Dragon Roots, and Solomons seal each one ounce and an half, of Orris Roots one ounce, and of Mastich half an ounce, Borax two drams.*

Also *the Water of Rice macerated or steeped in Lemmon or Bean water till it swell, distilled to a pint, ad half an ounce of the powder of Mastich.*

And *the white of Eggs mixed with the Juyce of Lemmons make a good Water distilled*; to which before the stilling you may add *Borax, Allum and Salt.*

The Venetian Paint is not to be omitted which is thus made. Take *of the whitest Lard that is sweet and cut is small, as much as you please, of the white Flowers of Bindwood, of the Juyce of crude Citrons strained, each as much as is sufficient, still them with a gentle fire in* Balneo Mariæ, *keep the water for your Use.*

The water also of Snails, distilled with *Goats Milk, and Hops, or Goats Grease, and a little Camphire.*

There is also an excellent Water made of Urine mixed with Salt, especially *Salt Gem. with Cloves, Cinnamon, and Rose-water,* to take away the Sent thereof.

Also a Water distilled *of white Tartar, dissolved in Wine, with Bean flowers, and Rosemary.*

Or, Take *of Tartar one ounce, Allum half an ounce, Borax two drams, Camphire one dram, of Water that is proper two pints, distil them.*

Or, Take *of Tartar calcined one pound, of Mastich one ounce, with whites of Eggs* make a Past out of which draw a Water.

You may make a water of Sublimate not to whiten, but to cleanse, either by dissolving it being steeped or boiled in the waters above mentioned Simple or Compound, especially in that of Bread, with the *Juyce of Lemmons*, you must take no less then three pints of water to *one dram of Sublimate*, and you must try by *Copper* put into it if there be enough: to which you may add *Ceruss, and Camphire*, and mix it with *Goats Milk, whites of Eggs, or Mucilages* least it should hurt.

Of more or fewer of those things may a water be distilled; as, Take *of Lilly and Orris Roots green, each four ounces, of Dragon Roots, or Cowkow pintles, and Solomons Seal, each two ounces, of Bean flower four ounces, of Rice flower two ounces, of the four great cold Seeds one ounce, of bitter Almonds five ounces, of Quince seeds half an ounce:* beat them all and add *one pint of Goats Milk, of Calfes Feet, and Snail broath, three quarters of a pint; of Bean flower, Water and Rose-water, each one quarter of a pint; the white of twelve Eggs beaten, Turpentine dissolved in the Yolks of Eggs half an ounce; of Honey one ounce, of common Sugar, or Sugar Candy, two ounces, of wine and Vinegar, each one ounce, of powdered Mastich half an ounce, of Allum, and Borax each two drams, of Camphire one dram,* mix and distil them.

To these may be added *Briony, wild Cowcumber, Sowbread, Guaicum, Lemmons, Oranges, Melons, Muskmelons, Gourds, or their Juyces. Also Primrose flowers, Bean flowers, Lillies Elder flowers, Pease, Lupins, Starch, Pine-nuts, Fleabane seeds, and the Gums of Traganth, or the Infusion thereof, Frankincense, Myrrh, Cinnamon, Cloves, Musk, Boys urine, Ox gall Litharge, Tartar, Ceruss, Soap, Goats Suet, or fresh Butter,* to which you may add shells and earths, from which little comes by distilling, as *Coral* and *Shel-fish*, and sometimes a little *Chalk*.

To take away the Spots of the Face, and whiten it, this is an excellent Water: Take *of Bean flowers, Turpentine washed in Goats milk, each one pound, whites of Eggs seven in number:* mix them and put them in *Balneo Mariæ*, keep the distilled water for your Use, then Take *a white Capon plucke, and washt and cut in pieces, and put that also in* Balneo, and mix the water that is distilled from it with the former, adding *two drams of Borax, half a dram of Camphire*, put them all in a long necked Glass, and set it by Night in the Moon shine, and by Day in the shaddow, wash the Face with this water warm.

This water following which was used by *Mary* of Medices, the Queen-mother is of most Vertue above all others, she used it to make her Face fair: it is made thus, Take *three white Capons presently after they are killed, and mince them small taking out their Grease, two new green Cheeses made of Goats Milk, the pulp of six Lemmons, the peels taken off, the whites of eight Eggs with the shells, of Borax, and Pouder of Brimstone, each half an ounce, of Camphire one pound, of Bean flower, and Water-lilly-water, each one pint, put them in* Balneo Mariæ, *and some Grains of Musk in the Neck of the Still*, keep the water that comes forth for your Use, wash the Face therewith every Night.

This water is good with Sublimate: Take *of Dragon or Cuckow pintles Roots, Sowbread, and Solomons Seal, each one pound, of Crumbs of Bread half a pound, of fresh Lard one ounce and an half, of Juyce of Lemmons two ounces, in which Sea Snails have been dissolved, of Allum two ounces, Sublimate half an ounce, or less, distil a Water.*

A Decoction is used to wash the Face to make it clear, and to wash off what hath been formerly laid on, especially of *Beans, Pears, Rice and Lupines*, and the like abstergents or cleansers. In a ful fat Face the Decoction of *Guaicum* is approved.

Some Liquors are used, as of *Melons* thus made, let a *Melon* sliced be put in a Pipkin, and at the top of it unripe Grapes, *Mallow-flowers*, and some Eggs shells, let these be kept well stopt in an Oven so long as the Bread is baking, this done, strain forth the Liquor for your Use.

Some use Snail-water made of Snails and Salt so baked in an Oven as the former.

Some mix Snails and Melons together.

Maids being fasting use to spit into their Hands and rub the Hair of their Fore-head backwards and make it shine, which wil whiten more, if they chew *bitter Almonds* before.

Moreover the Face is anointed with fat Liniments, which bring Splendor, and it is to be done carefully least the Paint appear.

Pomatums do this.

And chiefly the Marrow of a sheeps bone which is taken from them, being well cleansed broken and boiled, swimming at the top.

Oyl of Talcum to whiten and make clear the Face and

Hands is of most use among great ones, and is of great price because it makes them also soft.

Of *Mucilages*, the Infusion of *Gum Traganth* as also the *white of an Egg*, is best to make the Face shine.

Remedies that make the face & hands soft and white.

Some things may be used to the Hands to cleanse them and make them white and soft, which are not so proper for the Face.

For this there is a paste with which they rub their Hands as with Soap, made divers waies.

The most plain paste is made of *Crumbs of Bread, boyled Bran, or Barley flower, Rice, Pease, Lupines*, which we use alone or with water, or with soft Soap, or hard a little dissolved, and Honey we make a paste.

Of Nuts there is another Paste, as of *bitter or sweet Almunds, of Peach Kernels of Hazel and of Pine-nuts, Beans bruised, or first steeps in Milk, or mixed with Soap or Honey.*

Also it is made of other seeds especially *of Guords and white Poppies.*

The Compound Paste is thus made. Take *of the aforesaid Simples one, especially that of Almonds, or of two or three the quantity of one pound, adding powder of Mustard seed two ounces or more, of Orris Roots half an ounce, this will sweeten it, and of Honey as much as will make a paste, to this add sometimes the pulp of Figgs, and Rocket seed, instead of Mustard seed; some add the Gall of an Ox*, but this leaveth such a bitterness that it is not commendable, we may also make it sweet scented with *Sanders, Wood Aloes, Angelica Root, Lavender flowers, Rose-water, or Musk &c.*

Others may be added, as this for the Hands, Take *of Cerusi half an ounce, of Starch three drams, of Borax, and Camphire each two drams, of Egg shells calcined half a dram, to them being powdered add of Lilly, and Water lilly, and Rose-water six pints, of Lilly Roots two ounces, of Bread Crumbs half a pound: boyl them well, then add twelve Yolkes of Eggs beaten*, strain them and keep them for your use.

Or make an Infusion *of Gum Traganth in Milk, and juyce of Lemmons, adding Cerusi, Starch, and the like*, and so anoint the Hands.

Also there is a paste of the *Roots Daffodils boyled and beaten, adding Tartar, and beaten Eggs.*

Where you will more mollifie when the Hands are very hard, anoint with the *Oyl of Guord seeds, or of sweet or bitter Almonds, dissolved with white Wax*, also you may add *the pulp of white Lillies, and Oyl of Tartar to cleanse.*

The pulp of Melons rubbed doth make the Hands soft and clean.

Remedies against wrinkles.

To diminish or take away wrinkles if possible, in the Face especially and sometimes in the hands, that the skin may seem less cloudy, and folded and uneven, there have been proper Remedies declared, albeit there are some cleansing Paints, as aforesaid, proper for the same; these that follow are proper, and such as by a cleansing Quality or by mollifying do enlarge the skin that was bound.

The seeds of wild Caraway bruised applyed with a Cerot are commended by *Dioscorides.*

Also *Briony Roots with Orobus, Fænugreek, and Chalk, or Earth of Chios.*

Others approve *the Water of Pine-apples that are green, the Flowers of Mullein, also the Roots of Asaron, and Solomons Seal.*

The Water of the Flowers and Roots of Lillies with May dew is admirable.

The Juyce of Lemmons, Primrose, Cuckow-pintle Roots, and of stinking Gladen, do lift up the skin, and make it break and a new one come under it.

The Decoction *Jesamine seeds, also of Figgs with Briony Roots.*

Oyl of Myrrh, Jesamine, Acorns, Tartar, bitter Almonds, Pine-nuts, and Ivy-berryes.

An Emplaster. Take *of pure Wax one ounce, dissolve it with Asses Milk*, stir them and when they are cold, take them off and add *an ounce of Oyl of sweet Almonds, Allum, and Sperma Cæti each half an ounce*, dissolve and spread them and apply it to a wrinkled Fore-head or the like.

Let the Meal of Lupines be rubbed on with *Goats Gall.*

Or, Take *of Hens Grease two ounces, of white Wax one dram, of Rose-water one ounce*, dissolve them, add *of Cerusi, two drams, of white Coral one dram, of Camphire half a dram*: make *an Oyntment.*

Pomatum is in great Use.

The Fume of Myrrh cast upon coals, and received on the Face, is said to be good.

They also study to take away Wrinkles from other parts of the Body, as those which are left after Child-bearing upon the Belly.

This is done with this Oyntment made *of the Suet of a Kid*, or *Ram, in Rose-water*, or *Pomatum with a little Butter, and the white of an Egg, with the the powder of Mastich, and Frankincense.*

Or, Take *of Mastich, and Frankincense each half an ounce, of Myrrh two drams, of burnt Harts-horn, one dram, of Amiantum two drams, of Salt Ammoniack one dram, of Barley Meal, two drams, of Nigella one dram, of rosted Squills half a dram, with Honey make an Oyntment.*

Medicines that make the Lipps and Cheeks red.

Medicines that make red are used by Women that study Ornament, to their Cheeks and Lips, and so they take away the Paleness and ill Colour by painting with these that follow.

The Roots of great Madder rub'd upon the Cheeks makes them red, and also if these be mixed with Oyl anointed.

The Powder of Briony Roots mixed with Water or Honey, if the Cheeks be washed with the infusion, or anointed therewith, it will make them red.

They write that the *Sea Onion* and *Dill seed* anointed with *Honey* and *Wine* will do the like.

That Red which Painters make *of Sanders, and shavings of Brasil steeps or boyled in Water, Wine or Vinegar, with Allum* will paint the Cheeks, and Lips red.

The Spanish Women do colour the inside of their dishes with *Cuchynelle*, and call it Vermillion of *Spain*, and so keep it, and when they will use it they spit upon it and paint their Cheeks.

The cheeks being rubbed with Scarlet or Silk dyed with Cuchineile, or Crimson dipt in a little *Aqua vitæ*, turn red.

Some Women rub their cheeks with red Leather to make them red.

I have observed that if one rub her cheek with ripe *Mulberries* and then after with a green, and wash with Water thereupon there will remain a flourishing colour long after.

That Cure which belongs to particular Discolorations, is either for Commaculations or Spots.

The Cure of commaculations is according to the cause which is external, either, Air, Filth, or other things that discolour the Skin.

The Cure of Sun-burning.

They who by Labour and Travail are Sun-burnt, think it no dishonor but a commendation, and therefore care not for the cure, because in the Winter it usually decreaseth. But if this Blackness displease, we must prevent it, and destroy it.

Thus we prevent Sun-burning.

A broad brim Hat or the like, or Gloves for the Hands prevent sun-burning.

Or defend them with anointing with *whites of Eggs, or the Mucilage of Fleabane, or of Quinces, Extracted with Rose-water, or with the Infusion of Gum Traganth* made therein. To these are added *Butter or Suet, or Pomatum, or Oyl of sweet Almonds, or Cream of Milk*, in a small Quantity least the Face being anointed with those fat things, or without those by the use of dryers should appear extended.

The pulp of the Juyce of Melons doth the same, and of *Guords* adding some of the unctious things mentioned.

Or anoint with this before you go into the Sun. Take *of Pomatum two ounces, of Cerusi dissolved in Rose-water one dram, of Frankincense, and Mastick each half a dram, of Mu-*

cilages

cilage, of Quinces one ounce: make *a Liniment.*

This blackness by Sun-burning is sometimes cured by Nature; which supplyeth continually the Burning which is new and little, with a fresh skin, if they keep out of the Sun, except it pierce to the true skin, and then it will scarce go away of its own accord. And then it must be cured by paints and cosmetick Remedies, as the Natural blackness which have been already described, and therefore shall not be repeated.

Moreover, we cure this by taking away the burnt skin from the Face and Hands except the Impression be too deep as we have said. This is done by lifting, and raising the scarse skin to make it fall off by this following Remedy. Take *of the Roots of white Lillies one quarter of a pound, roast them in the Embers, then beat them with one ounce of sugar candy,* lay it upon the Face, and repeat it often, alwaies anointing with Honey when it is taken off.

This will be done sooner if you add *fresh Butter, or Hogs grease washed in Rose-water three ounces, Turpentine half an ounce, Lime five times quenched two drams,* and so apply it.

Or add *Lilly Roots so roasted two ounces, the Roots of Reeds, and Dragons, and Beans two drams, Melon seeds one dram, the Mucilage of Fleabane, or the Infusion of Gum Tragamth one ounce, of the Citron Ointment half an ounce:* make an Ointment according to Art.

If you add a little *Water of Sublimate boyled,* it will sooner raise the Skin.

An Onion, or Squill, or a Lilly Root often rubbed upon the part doth so raise the skin, that it will easily come off.

The Cure of the Pollution of the Skin by Filth.

An evil Colour from Filth, sticking to the skin, is taken away with the filth as we shall shew in the Treatise of filth: those which keep the hands and Face clean have been declared.

The Cure of the discolouring of the skin from external causes.

A black, yellow, or green Colour, or the like, with which the skin is infected, is taken away as other filth of the skin, and it is done sooner or later as it hath taken Root.

First, that which comes to the Hands from handling green Wall-nuts, is a blackness which sticketh fast, but at length vanisheth of it self, and will by use of cleansers, aforementioned be sooner gone, if rubbed with *the Juyce of a Lemmon, or Vinegar, and a little Colophony.*

The Redness that comes upon the Hands by gathering *Mul-berries,* though it stay otherwise long, is quickly taken away if you rub the parts with *green Mul-berries,* and after wash with Water.

The Cure of Spots is according to the Diversity of the cause, which is internal, as Blood, nourishing Juyce, or Seed, or a Disease.

The Cure of blackness from Strooks.

Black, and blew Spots do appear after Contusions and Strooks, by reason of the Blood breaking through, under the scarse skin, these, if they require cure, are to be cured as contusions whereof we spake formerly. But if the contusion be cured and yet the spots remain, then we must chiefly have regard to them. They use to go away of their own accord, because the Blood cannot grow thick putrified in the place as it doth in a large space, but is made waterish and thin, and so may pass through the Pores by insensible transpiration. But if by reason of the plenty of it, and thickness, this will not be, but it continueth, and there is fear that being thick and putrified it may ulcerate, you must apply Medicines that discuss and dry, to which if we come at the first while the Blood floweth we may add astringents, but after we use only Discussers and Dryers, and they are thus made.

Herbs fresh gathered may be bruised and applyed, or a little boyled, as *Wormwood, Hyssop, Calamints, Organ, Hemp, Rockes, Devils bit, Arsmart, Sneesewort, Mallows, Ameos,* or they are mixed with *Honey, and Bran, and Cummin seed.*

A Raddish Root sliced doth the same.

A Decoction of the Plants aforementioned *in Wine, and Honey, with Vinegar* at the first, makes a Fomentation, a Fomentation of warm water, especially if Salt, if often used will do it also.

Also the Juyces of the Plants mentioned, especially of *Wormwood, boiled with Honey, and Aloes, and with the powder of Cummin seed, and also the Juyce of Raddish and Coriander.*

Divers Oyntments and Applications are made of other things, and chiefly *of Nut Kernels beaten with Honey and salt.*

Or *Salt, Wine, and Honey mixed in equal parts, Cummin seed also pondered with the Yolk of an Egg, and Wax, or Honey,* to this you may add a little *Camphire.*

Or, Take *Bean flower, and Fænugreek, of each two ounces, Cummin one ounce, ponder of Wormwood two drams,* boil them *in Wine, and Honey, adding half a dram of Saffron:* make an Emplaster.

Or, Take *of both Comphrey Roots, of Flower-de-luce roots, each half an ounce, of Raddish one ounce, of Mallows, and Wormwood each one handful, of Chamomel, and Melilot flowers each one pugil:* boil them *in wine and water,* then stamp them, and add *two ounces of the ponder of Fænugreek, or the like, Cummen half an ounce, of Mustard, or Rockes seed, two drams, of Frankincense, Myrrh, or Lac, each one dram, of Goats Dung, half an ounce, Salt two drams, Ox gall one dram, Honey one ounce, Oyl of Dill two ounces:* make *a Cataplasm.*

This is most excellent, Take *Orpiment half a dram, of the Meales aforementioned, two ounces:* boil them *in Wine for a Cataplasm.*

Anoint the part with the blood that comes forth of a quill new drawn.

Or with the Gall of a Goat, or Ox, with Honey, or the Yolk of an Egg.

Or apply Goats Dung or Ox Dung *with Cummin.*

The Lungs of a sheep hot applyed do discuss spots.

Oyl in which *Briony Roots* have been boyled or the like, or *of Roses, Olive, Chamomel, with Salt.*

Or Oyntment of Alabaster.

Scarification doth make way for the Blood under the skin to come forth, which may be used if it be much, and stay long; least it putrifie and infect the quick part and make a Gangrene, in the suspicion of which you must scarifie deep.

But if by putrefaction an Imposthume, or Ulcer be bred, you must cure it as an Imposthume or Ulcer. If a Gangrene be as it happens from a great Contusion sometimes, then it must be cured as a contusion and Gangrene, of which we spake formerly.

The Cure of all kinds of red spots, Fleabits or Freckles, Erysipelas, Tetter, Rosy-drop.

Spots that come from the dispersing of the Blood through the skin, if they be small, and red and little as Freckles, like Fleabites, they somtimes go away by insensible Transpiration or by sweat, as also the broad Anthonies fire; yet if they continue long they require cure, as Tetters and those bloody Spots that are so red in the face and other parts, which are hard to be cured. And that which is called the Rosy-drop is very difficult, if the face be also full of Pustles, and the Nose much swollen.

If then you desire to cure these, which some despaire of, and therefore neglect, you must begin thus. First purge the Body in respect of the abundance of humors, and you must let blood in the Arm for Revulsion, or in the Fore-head. for the Face, or under the Tongue for Derivation, or by scarification in the sides of the Neck and Shoulders, and by Cupping-glasses, to draw from the Face, often repeating them, either with or without scarification. And this may be done by Horsleeches to the Face, Nose, or there about the Nostrils, or cheeks, or chin, or behind the Ears. Then use things that alter, which allay the Heat, and cool the Blood, and keep it from running so violently into the part, either by way of Diet or Physick; As hath been declared in Diseases of Blood.

The Topical Medicines which are applyed to the part must

must in these red spots be such as cool and astringe the blood, and such as consume the abundant Juyce by a drying and digesting Quality, if the spots turn to Pustles, and these must be strong, if the swelling be hard by adding if other things fail, such as corrode and burn.

These are applyed in Liquors, Waters and Oyntments, with which you must anoint, or wash the red Pustles; or if you apply strong things, you must only touch the Pustles: they are divers.

First, they are made of Plants, *as Water of Straw-berries, Ash, and Mullein flowers, with Camphire, and wine of straw-berries.*

Another usual which is very good: Take *in the Spring one pint of Straw-berries, or in Winter one pint of sour Grapes, of Goats milk two pints, twelve whites of Eggs, and the Mucilage, of Fleabane, and Quinces, of Gum Traganth, made in Rose or Plantane water, four ounces, of Camphire two drams,* distil them. You may add *Vinegar, Juyce of Lemmons, or the Plants following, also Allum, and Sulphur.*

Or use this following. Take *of Speare, Dock-roots three ounces, of Plantane, Nightshade, Sorrel, Mallows, Fumitory, each one handful, of Roses, Violets, Water-lillies, Honey suckles, willow, each one pugil, of Lemmons, Oranges, or sharp Apples, seven or nine, of green Mulberries, Strawberries, or grapes half a pound, of Allum half an ounce, of Camphire one dram:* distil them, *Brimstone* added makes it better, but it will sweat so, well.

You may add *Water-lillies, great Penny-wort, Houseleek, bastard Dittany, Pomegranate flowers, green or dry.*

Or thus; Take *Goats milk four pints, of ordinary meal, as much as is sufficient,* and make *Bread thereof, half bake it, and take of the Crust, and break it in pieces, and dissolve it with four pints more of Goats milk,* adding *Lemmons peeled and sliced twelve, Raddish, and Spear-Dock Roots, each two ounces, whites of Eggs beaten twelve, Allum half an ounce, Tartar, and Sugar, each three drams, white Coral, two drams, Egg shells calcined, and Camphire each on dram:* mix them well, and distil a water from them by a Lembeck.

Allum water, so called, of Plantane, and Purslain water, Oyl, Allum, and whites of Eggs is good also.

This following *Vitriol water* is good against a red Face. Take *of the water of Froggs-Spawn, Mullein, Fern, each two pints and an half, of the Urine of a young Boy three pints,* to these mixed, add *of the Treacle of Andromachus two ounces and an half, of Vitriol, Salt, Allum each four ounces,* draw a water by the Embers, or *Balneum Mariæ,* till the residents are dry. To which water add *Camphire, and Saffron, each one ounce:* keep it for Use.

The powder of Spear-Dock roots, and the ashes of Daffodils, with Oyls, make a laudable Oyntment

The hot blood of a Hare, or other Creatures is good to take away Redness.

Of *quick Brimstone* Applications are especially good to take away Redness.

If it be mixed with cooling or astringent Juyces, as the *Juyce of Houseleek, Nightshade, or Plantane, or some sweet water, as of Roses.*

Or, Take *of quick Brimstone one ounce, of white Frankincense half an ounce, of Camphire two drams,* dissolve them *in one pint of Strawberry, or Rose-water,* and you may add *the Juyce of a Lemmon, or four Pomegranates.* And it will be better if you add *common Salt, Salt Ammoniak, or of Allum two ounces, or Litharge boiled in Vinegar, or Cerus.*

Or, Take *of live Brimstone half an ounce, of Lytharge,* made white by Decoction *in Vinegar two drams, of Frankincense one dram, of Camphire half a dram, of Grains of Paradise, or Ginger one scruple, of Citron Oyntment, or white with Camphire, two ounces:* make a Liniment, and if you add *half a dram of Orpiment,* it will be better.

They make a *white Water of Lytharge* called *Virgins milk,* which takes away all evil Colours from the Face especially Redness. It is made thus, Take *of Lytharge powdered two ounces, of white Wine Vinegar six ounces,* more or less as it is in strength, steep them, often shaking them, or boil them a little. This done let the thick part settle, and pour off the clear and strain it. Then Take *of Allum, or Salt or both two ounces,* dissolve them in Spring-water, or other distilled water good for the Face, as *of Beans, Lillies, and Rose-water for the sons sake, six ounces, one dram or two of Borax, and a little Camphire* when we will use these two Waters, we take equal Proportions, and though they were clear before, (being mixed) they turn as white as Milk, with this wash the face; and if it be too sharp, you may add more water. Also by mixing the Ingredients of both Liquors, steeping or boyling them, this Milk is made; if you will cleanse more you may ad a little Oyl of Tartar or the like.

Another Water excellent in a red swollen Face, and when there are scales and Hardness. Take *of Litharge one ounce, of Allum one dram, of Borax three drams, of Cerus half an ounce, of Vinegar two ounces, or Rose, Plantane water, or the like, four ounces:* boyl them to the Consumption of the third part, strain them, add a little *Juyce of Lemmons.*

There is also a distilled water of the Virgins Milk mentioned which is good. Or this, Take *of pouder of Litharge one pound, of Vinegar two pints:* steep and boyl them, then add of Bean-water or the like one pint, draw a water adding sometimes other things, as *Allum, Camphire, Borax, Oyl of Tartar* before it be distilled.

Or use this Oyntment: Take *of Litharge prepared white (which is by infusing it thrice in Vinegar, and drying it) two ounces,* add *Vinegar, and Oyl of Guord seeds, as much as will make a Liniment, with Camphire dissolved in Rose-water half a dram.*

A profitable and convenient Water is made of *Tartar* thus. Take *of calcined Tartar half a pound, of burnt Allum one ounce and an half, of Borax one ounce, of Sugar candy two ounces, of Camphire two ounces, of whites of Eggs beaten twenty, of the Mucilage of Fleabane seed one ounce and an half, of the Juyce of Lemmons, or of Vinegar two ounces:* draw a water.

There is a powerful Oyntment made of *Camphire,* Take *of unsleaked Lime two ounces, quick Brimstone half an ounce:* pouder them, and boil them in Vinegar to an Oyntment.

An excellent Medicine of Quick-silver. Take *of Peach Kernels, or bitter Almonds,* chew them a little, and being brought to a Paste, *take out the milky Juyce with a linnen strained, and put thereto as much as a Nut of burnt Allum, then take as much Quick-silver as a Pease, and rub it in your Hands so long with spittle till it grows black, then mix it well with the aforesaid milkie Juyce, anoint the Face at bed time therewith, and in the morning, for the space of a Week; this done, before you go abroad wash it thus: make a paste of Bean meal, and Rice, with whites of Eggs beaten, keep this in balls, and soften one of them in water for a Night, and then rub the Face therewith upon a Towel.*

Another is made thus, Take *of Quick-silver one dram, of Fir-tree Rosin washed, one ounce:* mix them well, then add *half an ounce of Borax, one ounce of Sugar candy, of Cuttlebone two drams, of Soap two ounces, of Oyl of Tartar two drams or more, with as much Oyl of sweet Almonds, or of Roses, as will make a Liniment,* you may add *the Juyce of Sorrel, Spear Docks, or Lemmons, and Litharge.*

Excellent Medicines and strong are made of Sublimate, to be onely touched lightly, with which the Pustles being touched till the Skin be taken off, they fall away and dry or consume; thus they are made: Take *of Sublimate one dram, of Juyce of Lemmons, or Vinegar one ounce, of some convenient Water four ounces, of whites of Eggs six in number:* let them be steeped together close stopped.

Or thus, Take *of Sublimate half a dram, of Litharge half an ounce, of white Wine Vinegar four ounces:* boil them till the third part be consumed, to the strained Liquor ad *milk, the Juyce of Lemmons, or Oranges, and a little Oyl of Tartar.*

The Emulsion of *Variola* to take away Redness of the Face, which is most rare is thus made, Take *of Spring-water, in a glass ten pints, let it stand twenty four hours before to cleanse it, to this put in a thin rag of linnen one pound of white Poppy seeds bruised with two whites of Eggs, and two drams of Sublimate sweetned and well powdered, shake them in a well stopt*

glass

glaſs for an hour: to theſe add about the Concluſion of ſhaking of *white Sugar, and Borax burnt a little upon a hot Fire-ſhovel each ſix ounces.* With this emulſion waſh the face, morning and evening. You may uſe other Medicines that are made of *Sublimate, and Arſenick* that corrode and burn, mentioned in venemous Puſtles, if they be very hard to be taken off.

A Fume of Brimſtone, and Frankincenſe caſt upon coales, taken upon the Face, cures the Redneſs thereof, as we ſee red Roſes fumed with Brimſtone preſently wax white; but you muſt do it warily, and keep your breath, and ſhut your Eyes.

The Cure of divers Spots, Scurfe, Tetters and moales that are Natural.

The Cure which belongs to theſe ſpots which come by Nature, from the nouriſhing Juyce in the Pores, is chiefly againſt things which come of evil Juyce, that when they are hurtful, and threaten Danger, theſe Spots may be taken away, as the Morphew, and Scurfe and the like. Thoſe which come not by Nature, and evil Juyce as Freckles, although many, becauſe they are uſual to ſome and go away at Winter, or are leſs after hot weather are not medled with commonly. But becauſe ſome think they deform, and deſire to have them taken away: I ſhall teach the Cure of them.

The ſame is obſerved by Moles, that are Natural, and therefore not thought evil, and not regarded except they deform.

But in the Cure of all theſe ſpots, the internal cauſe muſt firſt be removed, as in Morphew and the like; but in others ſince the cauſe is not hurtful, as in Moles and Freckles it is not needful, except the body be other way foul, and we determine to make the Topick Medicines work the better, to cleanſe the Body.

In foul Spots we firſt evacuate, and with thoſe things which we uſe to cleanſe the body in the like filth, as the Scab and Itch, and we take heed by good Diet and altering Medicines, that they return not again.

As for Topicks that are uſed to take away ſpots which are ſo evil as Morphew &c. they muſt be of a drying and cleanſing Quality, by which they conſume them inſenſibly, and if weak things will not, uſe ſtronger, which eat off the ſame. And if that will not do, uſe Cauſtiks and Corroders, which will plainly burn or dry them up, or elſe take them off by manual operation: thus we can do in Moles. In Lentigines, or Freckles, we may do it with eaſier Medicines, becauſe they are many, and it is not ſafe to uſe ſtrong Medicines to all, except in one place we deſire to take off many. The Remedies mentioned for evil ſpots by vitious Blood, as Tetters, Puſtles of the face, and the like, are good here, and they all do it either by cleanſing onely, or by corroding, or burning or by pricking, or ſhaving off.

The cleanſing Medicines that do not corrode, both weak and ſtrong which are proper for theſe, are divers, as thoſe called Comptica and Coſmetica, by which the blackneſs is corrected, as we ſhewed, and eſpecially in taking away the lentils and in other ſpots they can do it by conſtant uſe.

To theſe are the cleanſers following applyed, to which if the ſkin be thick, we add Emollients and they are rubed upon them, and if we will have them work ſooner and better by the fire or Sun, they are taken from divers things from Roots and Herbs, theſe bruiſed or cut are rubbed or applyed, as the Roots of Dragons, Sowbread, wild Gourd, Briony, Flower-de-luce, Raddiſh, Onions heads, Daffodills, Leeks, alſo white Hellebore, Solomons Seal, Spear-Dock, Madder, Alkanet, Capars, black Chameleon, Water-lillies, Aſphodel, Gum Succory, wild Lettice, Beets, Coleworts, Penny-royal, Agnus caſtus, wild Purſlain, alſo the Stones of wild Vines, and Fruit of the wild Guord.

If you rub freſh Soap-wort bruiſed, it will froath like Soap, whence it hath its Name, and will cleanſe well.

Theſe bruiſed or a little torrified if hard, you may add the Meal of Lupines, Orobus, and the like, and to make them ſtronger, *Vinegar* and *Honey*.

With theſe Decoctions of Plants made in water or wine, or with Lye thereof being hot, the ſpots are rubbed or bathed eſpecially if there be many, as *Lentigines*, or *Freckles*, with other aſtringents, as *Roots of Danewort, Elicampane, Lillies, Leaves of Pellitory, Mercury, Mallows, Marſh-mallows, brank Urſine, Bugloſs, ſcabious, Fumitory, Hops, Succory, Sorrel, Violets, Cranes bill, Tarrow, Wormwood, the leſs Centaury, Water-creſſes, and Senna, with bran and bean-flower, ſtilled Waters alſo of ſtronger Plants, and of Roſins, of Fir and Larke-tree.*

Anoint them with *the Juyce of Plants, as of the Roots of Dragons, wild Cowcumber, or Elaterium, Flower-de-luce, Gentian, Dock, Capars, Thapſia &c. and chiefly with Juyce of capars, Leeks, Squills, Daffodil, Scabioſe, Cole worts, Lemmons.*

Oyl of Plants are uſed eſpecially in the Morphew, as *of Muſtard ſeed, and Spurge, alſo Oyl wherein Laurel, and ſpurge have boyled, or Roſe Laurel, the Juyce of Elm leaves, and of a Bees ſtalk,* take away any ſpots.

The Pouders of Plants, with *Vinegar, or Juyce of a Lemmon, or Honey, or Oyl of Greaſe, or the Yolks of Eggs, as of both Dragons, Solomons Seal, wild Cowcumber, Briony, white Hellebore, alſo the meale of Lupines, Orobus, Beans, Oates, alſo Muſtard ſeed, Raddiſh ſeed, and Rape ſeed in pouder, and Rocket, Cabbage, Nettle, Nigella, Hatchet vetch, Ricinum, and Peach kernels torrified and pondered with Agarick, the aſhes of Garlick, Lillies. and birthwort Roots,*

The Greaſe which is taken from living Creatures, as of the Fiſh Thymallus takes away Freckles.

The Blood of an Hare hot, takes away ſpots, alſo the gall of Beaſts, and Fiſhes.

Pigeons Dung, or ſheeps Dung, with Vinegar, Oyl in which quick Lizards were boyled, with Wine till it be conſumed is good againſt Morphew.

Alſo red Ants tyed in a clout and preſſed till the Juyce is taken forth.

Of earthly ſalt Juyces, common Salt, or Salt Gem, or Ammoniacum, or Niter, or Borax made of it, Allum, Halyonia, or ſea Froath, with vinegar, and Juyce of Lemmons.

The Pyrites, or Fire-ſtone, or Lazuſe with ſtrong Vinegar.

Tartar by it ſelf, or calcined, is alſo good eſpecially the Oyl thereof, this doth excellently.

And thus may it be made: *Take* of Tartar of white Wine, with Vinegar made into a ball, put it in clouts under the Embers, let it be burnt a little, then uſe it with Honey or it ſelf, for it will diſſolve, if you quench Gold often in ſack and ad a little white Tartar thereto, it takes away Freckles.

The Compounds are theſe, made of Plants, whoſe Decoction is good, with ſalt, common or Ammoniack, Niter, or Allum.

The Waters are thus made, *Take* of Docks, and Roots, four pounds, ſlice them, add Vinegar four ounces, Tartar two drams, Sal Niter half an ounce, diſtil a water for uſe.

Another, *Take* of Raddiſh Roots one pound, of Orris, and Dock roots, and Lillies, each half a pound, of wild Cowcumber, or Solomons ſeal, of unripe Grapes, each one quarter of a pound, of Pellitorry, water Parſley, Centaury the leſs, each one handful, of cold ſeeds, Rape, or Rocket ſeed each an ounce, of Barley bread, or Bean flower, one quarter of a pound, Turpentine one ounce; of Urin two ounces: diſtil them, you may add Myrrh, Frankincenſe, each half an ounce, of liquid Storax one dram.

Or this. *Take* of bitter Almonds, Peach Kernels, and Apricock Kernels, two pugils, of the Meale of Peaſe, Rice, Beans, each one pugil, of the four cold ſeeds the greater, each one pugil and an half: ſprinkle them with the Decoction of ſharpe Dock-roots, and Lemmons, or of Oranges, and Citrons, and with Ceruſs, two ounces, Tartar one ounce, of common Salt, or Niter, or Borax, half an ounce, of Camphire, one dram: make a water of this paſte.

An excellent Water: *Take* of Tartar calcined, one pound, Frankincenſe, or Maſtich, each half an ounce, of Camphire four drams, ſome whites of Eggs, diſtil them. Inſtead of Tartar, you may uſe the ſame weight of Soap.

Virgins Milk is good also, Take *of Litharge one ounce, of Allum, Borax, Ceruss, each half an ounce, of Camphire two drams, of Tartar half an ounce, of white Wine Vinegar, one pint, of Lilly-water, and Bean flower water, each four ounces, of Rose water one ounce:* boil and strain them by a philter, add *the Juyce of Lemmons, water of Dock, each three ounces, Borax, Camphire, of Sugar candy each five drams:* boil them again gently, and strain them for use.

Liniments are made of *the Juyces mentioned with Salt and Niter, and Borax, and Camphire.*

Another Oyntment. Take *of the Juyce of Dragon roots, and other Herbs mentioned of Moulein, three ounces, of meale of Lupines two drams, of Orris roots one dram, of Pigeons Dung one dram and an half, of Oyl of bitter Almonds, or of Eggs one one ounce and an half, of Oyl of Myrrh half an ounce, of Turpentine as much as is sufficient.*

There are other Oyntments. Take *of the pouder of the aforesaid Plants half an ounce, of Ammoniacum, or Niter, or Borax, or Allum, one dram, of Myrrh half a dram, Camphire one scruple, with the Juyce of Oranges, or with Honey or Soap* mix them.

For the Freckles: Take *of Dragons the great or less, or the middle bark of an Elm, half an ounce, of Cuttle bone two drams, of Frankincense one dram, of Liquid Storax half a dram:* make them up as before.

In the Morphew: Take *of Raddish seed, Nigella each two drams, of white Hellebore, Allum, or Sal Ammoniak, each one dram, of burnt Galls one dram: with Honey, and Vinegar,* make a Liniment.

A stronger, thus made: Take *Borax, or Niter, Allum each half an ounce, of Tartar calcined two drams, of the meale of Lupines, or Orobus half an ounce, the Roots of both Hellebores each half a dram, of Mustard seed one dram, of soft Soap or hard four ounces, of the Juyce of Dock roots, and Elicampane, each one ounce, of the Rosin of the Fir-tree a little,* stir them well.

Verdegreece makes stronger Oyntments, if half a dram, be mixed with half an ounce of the rest, sometimes Capars alone, or with Verdegreece with Oyl of Tartar.

Or, *Take* of Ægyptiacum two drams, of burnt Allum one dram, of Oyl of Tartar half an ounce: mix them. If it be sharpe, add a little Oyl of Roses.

Or thus, *Take* of white Hellebore, and Dragon Roots, each one dram and an half, Staphsager, Raddish seeds each one dram, of Savin half a dram, of Pepper one scruple, of Sal Ammoniack one dram, of Verdegreece one scruple, of Sulphur one dram, with Vinegar make Troches, which you may dissolve with Vineger or Juyce of Lemmons when you use them.

Corroding and caustick Medicines which consume spots and Pustles, some with pain, some without, as in the Morphew which is insensible, which are to be used warily least they hurt the part adjacent, and must only touch the parts affected are,

Of Sublimate, and Arsenick especially mixed with the aforesaid Oyntments.

Also a little Sublimate with the white or Yolk of an Egg, or any Mucilage, or Oyl, or Grease, may with caution, be applyed.

Or the Pustles may be touched with a water made of the Decoction of the same, which is this: *Take* of sublimate half an ounce, of some convenient Water, to which add Rose-water six ounces: boil them to the Consumption of the third part, if this be too sharp, it may be made weaker, also you may mix Oyl of Tartar.

That Water which remains as the preparation of sublimate, or the *Aqua fortis* of Gold-smiths doth the same.

Or use this following: *Take* of sublimate one dram, of Cantharides two drams, of Arsenick one scruple, of Willow, Arcoale one dram: pouder them, boil them in Water-lilly water, or Plantane four ounces, till they grow thick, add some Drops of *Aqua fortis*, dip a little Cotton therein, and touch the spots morning and evening, till they blister which you shall anoint with *Unguentum Citrinum.*

Or make this following Paste, and apply a bit of it dissolved in any water: *Take* of sublimate, and Allum each as much as a Pease, Borax two drams: burn them upon a hot Iron, and pouder them, with Mastich, Sarcocol, and Sugar candy, each half a dram: mix them well, in a Mortar with soft Soap, adding a little Ox gall. and after some Bean flower, and pouder of Nuts, let them be well dryed and made into a paste, and dryed for Use.

Besides these there are other Vesicatories, as the Leaves and Roots of Crow-foot beaten, and the Leaves of Laurel, and the Milk of spurge, and the like mentioned formerly.

Also Cantharides and unslaked Lime, with Vinegar.

Also they may be taken away with an actual or pontential Cautery, especially such as cause no pain made of lime and wine-Lees, or with the water made of Cauteries.

To prick many Holes is good in the Morphew, by which if the Blood flow, there is hope of Recovery.

Also it is good to shave them often.

The Cure of the spots in Feavers Erysipelas, small Pox, Measles & the like, malignant spots, or of the Pox, or Leprosie, or Scurvy.

The Cure of spots that come from a Disease was explained in the Cure of those Diseases whence they arise; as of an Erisipelas in Feavers synochus, also we have declared the cure of the Pustles in the French Pox, Leprosie, Scurvy, which do indeed constitute the Diseases it self, as it is in the skin, and produceth them, in the Treatise of those Diseases others require no other cure but of the Disease, as those in Feavers, which vanish with the Feaver the chief cure is to keep them from external cold least they be thereby stricken in.

Also there are other red, violet colour'd, and black spots in malignant Feavers, and when the Feavers cease they vanish, or they end alwaies with Death, which they presage.

Of Pustles in the small Pox.

But those spots which turn to Pustles which are called *Efflymata* or *Variolæ*, although they often require no other cure but that of the Disease; in which we rather provoke there comming forth, then hinder them, and take no more thought of them, because they commonly vanish of themselves or dry up, or turn to little Ulcers, and so are cured of themselves: yet if these come on slowly, some things may be given which may make them sooner dry and come to maturity.

To dry them, they must be wet with this Decoction with a quill or feather, or a clout. *Take* of Lentils half an ounce, of the inner bark of a Tamarisk three drams, of Myrtle-berries one dram, of Broom flowers half a dram: boil them in water, adding at the Conclusion a little Rose-water.

For private Use you may put into the Decoction two drams of red Sanders, or half a dram of saffron, and they will discolour it.

It will dry better if you season it with Salt: and Allum.

The Juyce of Pomegranates that is between sharpe and sweet, will sooneſt dry them and others of that Kind.

That they may be sooner ripe, anoint them with Hogs grease, or rub them with the insides of Figgs, or with the Yolk of an Egg, or the like.

When they are ripe they open of themselves usually. And if not, or if it be long a doing in regard then the flesh will be eaten with the Matter contained, there will be a hollow Ulcer, and there will be left a Scar, with a pit. Therefore to avoid this great Deformity of the Face, they must soon be opened with a Needle or sharpe Instrument. (which if made of Gold is supposed to leave the less scar.) It often happens that when they are ripe, the Matter endeavouring to get forth, causeth itching, which causeth scratching which leaves them open. And this women are very sollicitous to keep their Children from supposing that it causeth the pitting, but falsly, for it comes from their want of opening and the long continning of the Matter. After they are open, because they are covered with a scab which is made of the dry matter, because it will fall of it self, you need not use any means.

But

But if any remain long, rub them with a fat piece of skin that is salted, or other Emollient and they will quickly fall off. And in regard they are small Ulcers, if you cleanse them often from filth, they will heal of their own accord with Application of any thing: but if there remain any Scars in the face, they must be cured as is said concerning Ulcers.

If the Pox do not only annoy the skin, but the Nostrils within, and there turn Ulcers, we shewed the Cure of them in the Ulcers of the Nostrils: as also in the Treatise of the Lungs and Jawes, if they be there. Among other things sharpe Vinegar smelt unto often, keeps the Pox from entring into the Nostrils.

The Cure of streaks and white spots of the Eyes and of the Pox, or Meazles therein.

The Cure of the discolouring of the Eyes, which comes from Diseases, was explained in the Diseases of the same; as Redness, in the Inflammation of the Eyes true or false, or in the Treatise of Rheums. The red or blew spots, are declared in the streaks, and the white spots, in the spots, suffusions and scars of the Eyes.

But if the Pox or Meazles get into the Eyes, you must labour to prevent them. Therefore anoint the Eyes being shut with these following, if any of it shall get into the eyes by chance it wil rather do good then hurt.

As *Rose, Plantane, Myrtle and Coriander Waters.*

The common Water is that of Roses wel coloured with Saffron, Or the Decoction or the Infusion *of Sumach leaves, in* the said water.

Or drop in *the Juyce of the Flowers and Fruit of sweet Pomegranates, mixed with the Juyce of Henbane.*

Or *the ponder of Henbane flowers, with sharpe wine,* is to anoint the Eye-lidds.

A good Eye-water. Take *of the ponder of Sumach flowers one dram, of Coriander seed, or Myrtles prepared half a dram, of Saffron one scruple, of Camphire half a scruple, of the waters aforesaid, eight ounces*: mix them well.

It wil be stronger if you ad a little *Juyce of Pomegranates.*

Some think that if you compass the Eyes about with saphyrs of Gold they will keep out the Pox.

When they are in the outside of the Eye-brows, you may also use the aforementioned water dropping it also into the Eyes, adding of Tutty prepared, or the white Troches of Rhasis half a dram. And if they turn to an Ulcer by suppuration, there is Danger of loosing the sight, and then they must be cured, as the Ulcers of the Eyes mentioned, and be sprinkled with the fine pouder of Beans, and Sugar candy, and other things mentioned in scars, to prevent and take away the scar.

Things that make black Eyes.

Some use this Art to make grey Eyes black, which they take to be the most beautiful: they put into the Eye, the fine pouder of Nuts with water.

We have seen grey Eyes turn black of their own accord, in time: and I saw a Man some few years since, in the House of my Father now deceased, that had one grey Eye, and another black, which was ridiculous. And when he put his hand between his Eyes, he seemed still another Man.

The Cure of the discolouring of the teeth

Where the Teeth are discoloured, and by reason of filth and scales black or yellow, they are divers waies whitened, as was shewed.

The Cure of Nails discoloured.

The discolouring of the Nails require not a peculiar Cure, unless there be other faults as clefts, corrosions &c. of which we spake in Deformities.

For if they begin to wax black, by reason of Paleness of Body, or to have black spots underneath, by reason of some stroak or bruise, in regard the Colour is not in the Nayles but in the Flesh underneath, and is seen through them being transparent, they must be cured no otherwise then was mentioned in Paleness and Bruises; and if Blackness under the Nails be from filth, we shall declare the Cure in the Treatise of Filth in General.

As for the white specks which are in the Nails by reason of thick Juyce, in regard they are not evil, but signs of long life especially if they be many, as in young Men, or if few in old Men they have hope of long life: therefore are they commendable,

The Cure of discolouring of the Hair.

That Discolouration is chiefly observed in Hair which is exactly white, as in old age, because it is venerable, it is not meddled with: but young people study to change. Some disdain the red Hair, and others highly esteem it. To change them into other Colours is impossible, because in grey hairs, there is such dryness which takes away their perspicuity, as we shewed, that they cannot be changed: and in red and the like, the Juyce that nourisheth will alwaies produce the like by assimulation; as we see, when hair is pluckt off, the like grows again, and in Birds if one feather be pluckt off, although all there about are of another colour, yet there will be another of the same Colour with that pluckt off, as I have often tryed in Pigeons.

The cure of grey Hairs.

Some old men desire to be black or the like, and to seem young. And young men if they have any grey Hairs in Head or Beard, as often is seen, they desire to have them like the rest, or to make red hairs black; and this is done by the Comptorian Art mentioned, by which another Colour is made that will not continue. By adding chiefly astringents which may make them black or at least obscure them; but that they which grow after may be of the like colour, it cannot be done and therefore we cannot prevent the appearing of grey hairs, except we use them constantly, which is not only troublesome but hurtful for the Head; but to make the Head or Beard black, you may wash or anoint them with these following.

Things that make white Hairs black.

A Decoction, made in Lye, or Rain-water, or Iron water, wherein Iron is quenched, or *of Galls, green Wal-nuts, Beech mast, Cypress, Myrtles-berries, Willow-roots, Mastich-tree leaves, Myrtles, Sumach, Mulberries, black Berries, Cypress, Roses*: and it will be stronger, if you add *Litharge, filing of Iron, or Rust and Vinegar, or other astringent Juyce.*

The Decoction *of Myrobalans* is approved, and also, *of Capar roots, or Leaves of Ophris like jagged Coleworts, or black Vine.*

And if the head be to be washed you must ad such things as respect the Head; chiefly *Sage, and Bay-leaves,* and the like.

They say if you wash hairs with Wine in which a *Horseleech* hath been drowned it will make them black.

Stilled Waters of the strongest Plants mentioned, may do somthing, especially if before you still them, you add *Sal Niter, Sal Gem, and Vitriol.*

Also a Water drawn from Ink may be good, which if used by it self would black the Body too much.

Some approve *the water of Dunwort, with Gum Arabick.*

Oyl also wherein a Lizard hath been boiled, or in which the shells of Nuts, and Allum hath been boyled.

Or that Oyl which is put into the hollow of a Coloquintida Apple, with a little Orpiment and rosted in the Embers, and then strained out, some add thereto the Seed of Henbane.

Or, Take *of common Oyl, or of Myrtles, or of Mastich, half a pint, of Juyce of green Nuts, four ounces, Vinegar two ounces, Acacia, or Hypocistis, one ounce, of Galls half an ounce, of Allum two drams, Vitriol one dram*: boil and strain them. You may also boil therein other astringents, as *Myrtle berries, Cypress-nuts, Myrobalans, Acorn cupps, Sumach &c.* also *Labdanum.*

There are other Oyntments, as *of Galls, or Pomegranate peels, and Allum, boiled in Vinegar, or Oyl*

Or, *of the Juyce of green Wall-nut shells, or of Acacia, Hypocistis, Labdanum, and Allum, and Sal Gem or Niter, dissolved in Oyl of Myrtles, or Juyce of Beets.*

Or *of Litharge boiled in Lye to half a pint,* whereof if you

add

add *four ounces of burnt Brass*, it will be better, *and half an ounce, of Oyl of Tartar*, after it is boyled.

Another Oyntment. Take *of Litharge, and burnt brass, the quantity before mentioned, unslaked Lime, ten ounces*: and boyl them in water to the Form of a Liniment

We make hair black by Degrees with a Comb, if we anoint the Teeth thereof with the aforesaid Remedies; or with the filings of Iron, or Rust or of Lead boiled in Vinegar.

It will be of better Operation, if two drams of filings of Iron be dissolved in *Aqua fortis*, with a little pouder of Orpiment, and therewith anoint the inside of the Teeth of the Comb, not at the ends, least they touch the skin, and cause Ulceration.

To comb the Head and Beard with a leaden Comb often, is thought a good way to make Hair black.

In blacking of hair, you must note that these Medicines are so to be ordered that they compleatly make black, least the same happen to them that use them as did to an old Man, not long since, who marrying a young Wench, desirous to make his grey hairs black, to please his Spouse with a sophisticated Youth: made his hair of his Head, Beard and Eye brows green, to the great Laughter of the Beholders..

Moreover, if the Hair be very black, and have no yellow or inclination to brown: they that are studious of getting Beauty, do diminish the blackness a little,

The Remedies that make hair less black.

And that they may not seem so extream black, which they count uncomely, or white which the high Dutch call *Stein* and the French blond, they use these following.

They first wash them with Lye, and while they are wet, they fume them with melted Brimstone, and when they are dry they anoint with the poplar Oyntment, and the fume of burnt Brimstone will do it better.

The Lye of Vine ashes doth the same, or in which the *the Roots of Elicampane, the greater Centaury, Raddish, the barks of the Roots of Capars* have been boiled, you may add *Allum and Sulphur*.

Or make this Wash. Take *of Sulphur two drams, of Frankincense one dram, Allum half a dram, Swallows Dung, two drams, of Raddish seed powdered, and the barks of Capar roots, and of Elicampane, each one dram, of Ox gall half an ounce. With Vinegar or Glew dissolved in water*: make a Liniment, you may add *the ashes of the white flowers of Mullein*

Medicines to make Hair yellow.

To make hair yellow, which the Venetian Ladies do extreamly labour for; they are first to be prepared, that they may better take the Colour, with water in which Allum, Salt, or Niter or Tartar have been dissolved or boiled: or wash them first with the plain Lye aforementioned.

A Water to prepare is made also of Agrimony, Dragons, Cuckow-pintle, with Vinegar, and the fourth part Niter, and of Honey, with Gum Arabick.

A Lye to wash hair is made of the ashes of Vines, and Oat chaff, with ashes of Ivy wood, of Cabbage, and Bean flowers; and pouder of Herbs: all these are laid upon Oat, or Barley straw, and the water is strained through them for to make a Lye.

A Decoction to wash hair also is made of water and common Lye of Vine ashes or the like, in which you boyl things that have yellow Juyce, as shavings of Box, Barberry bark, Orange or Citron bark, the middle bark of Elder, Roots of Celandine, Liquorish, Turnerick, the yellow flowers of French Lavender, of Mullin, Broom, Dyers flowers, sometimes with Rhubarb, and Saffron, and other Plants which do the same, as Nettle Roots, Agrimony, the Capilar Herbs, Barley, and Oat chaff, Lupines, Cummin, Fœnugreek, also Ivory shavings, adding somtimes Myrrh, and Tartar, or Salt, or Niter.

Anoint with Oyl in which shavings of Box, Celandine-roots, Saffron, and the like have been boyled, or Myrrh.

An Oyntment. Take *of Myrrh two drams, of Tartar one dram and an half, of Salt one dram, of Saffron half a dram, with Oyl* in which some of the aforesaid have been boiled: make a Liniment, some add burnt Bees.

Medicines to to make red Hairs.

To make Hair red, which is thought most beautiful in some Countryes, you must wash them with the Decoction *of Madder roots, Raddish, Lote-tree rasped, Lupines, and Wormwood made in Water, or Lye, also the Juyce of Raddish, Bucks-Thorn, or Raddish water, or the Oyl of wild Cucumbers, with calcined Tartar.*

Alcanna, or *Hanna* in *Barbary*, (some sticks whereof are brought from the Barbery Coasts saith *Lobel*, being yellow within, which *Dodonæus* takes to be the Cypress of *Dioscorides*, different from privet, which they took for it) is the best to make hair yellow; and usual to my Knowledg, among the Turks which admire red hair in Women and Children, and it is so strong that it dyeth the Nails also and other parts when they please. The Leaves thereof bruised are rubbed on, either by themselves, or moistned first in the Juyce of the Root as *Dioscorides*. In defect whereof, I beleeve if we boil those sticks which are brought over they will do the same: or *Oyl of Cypress* which is made thereof and is counted excellent for the same.

Things that make Hair sweet.

To make the Head and Beard sweet, you must mix sweet Herbs, as *sweet Marjoram, Lavender flowers, Cloves, Nutmegs, Muck, Ambergreece* and the like, in Decoctions and Liniments.

And there is a sweet Soap which is made divers waies for that purpose.

CHAP. III.

Of Extuberances or Swellings.

The Kinds of Swellings.

WE call it an Extuberancy, when the Body is not over great in General, but swelleth in some part; when it hath not a part too many, but a Swelling or Excrescence in some certain place growing in it, or upon it. Which when it is without the Superficies of the Body, and is without pain in its self, or if it have pain or bring trouble to the part affected, yet the Swelling is most regarded, is that we here speak of. As for internal Swellings that lie hid in the Body, we spake of them in the hinderance of Functions. But these external Extuberances, when they are of divers Kinds, we bring them chiefly to these two, some are General, some particular.

General Extuberances are the Swellings spoken of, which possess a large part of the Body, when either the whole body or half, or the Belly only swelleth: as shall be shewed in particulars.

The white Dropsie.

The whole Body swells especially the Face, Hands, and Feet and other parts in the Disease called *Leucophegmatia* from the white Colour and Moistness thereof, which causeth it: and they call it *Anasarca* or *Hyposarca* which is a kind of Dropsie, because the water is gathered under the skin and flesh. This Disease commonly follows a Cachexy or evil Habit, which declared it self before by Paleness; and it is by degrees made of that into a soft Condition: and in both the Urin continueth pale. There is Faintness of the whole Body, and there is somtimes withal a lingering Feaver, and other diseases, and there is Symptoms, as we said of Cachexy.

Anasarca or Hyposarca.

Serosa Leucophlegmatia, or white water Dropsie.

There is another Kind of white Dropsie which they call watrish from the cause, in which the Swelling is more loose and soft then the former,

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especially in the Feet, and not much differing from that of the Ascites, because they will easily pit with the impression of the Finger, and it will remain long: yet this is distinguished from the Dropsie Ascites, in regard it is general and the belly is not larger then other parts, and there other signs in Ascites. There is also a third kind of Leucophlegmacy, in which the Body riseth into a fuller and softer Tumor, and is like both in tumor and splendour in the Feet, and Legs to the Ascites, and they swell most, and this kind sometimes comes upon a Man by degrees and sometimes suddenly.

I lately had a Virgin marrigeable, my Patient, which had a Feaver with an Erysipelas, and exposing her self to the cold with washing Linnen, fell into a difficulty of breathing suddenly with a watery Tumor, over the whole Body beginning first at the Feet, which water fell in her Thigh and broke notwithstanding the Tumor of the whole body remained and increased dayly: she lay a few months and then died.

Besides these, we have observed another Swelling of the Body, Face, and Joynts, that riseth suddenly somtimes, not so soft, but stretched out and yet will not pit, as if the skin were blown up and this we call the Inflation of the Body.

The blowing up the whole Body or Swelling thereof.

In the Dropsie Ascites, the body swells from the top of the belly to the feet, and it is so called because the belly resembleth a Bottle of water. In this the Tumor begins at the Feet and the lowest part of them, and then it riseth to the ankles, and so by degrees to the knees, and to the lower part of the Thighs, and grows dayly higher as the Patient sits or walks more or less, it decreaseth somthing at Night when he lieth down, and pits keeping the print of the finger some time, and when it is stretched out it seems shining and transparent. The belly begins to swell with the Feet, and at length it is stretcht from the sides to the Privities, and the ends of the Ribs are thrust outward: being moved it makes a noise, and if the Patient turn upon his side, it falls forcibly down. In the skin also under the Navel, and in the black swollen, if you press it with your finger there wil remain a pit as in the Feet. The Cods are swollen as the belly and are transparent, as in the Hydrocele, or water Rupture, but greater, somtimes as big as the Head. The Yard swelling is four times as big, and transparent, and is crooked like a great Pudding. So also the lower parts grows greater and the upper parts consume.

The Patient in this Dropsie is very short winded, especially when he goes up hill, or lieth down, and it is the chief Symptom he complains of; which also foretelleth a Dropsie before a tumor appear, and when it comes it increaseth, and from the beginning about Midnight after Concoction, there is a pressing pain at the Heart, and then short breathing, and they are in Danger of choaking, by which they are constrained to sit up like men in an orthopnæa Breathing with their Neck stretched out. And when they lie on the one side, either right or left, they cannot lie long for shortness of wind, on either side, but are forced to lie upon their Backs. At last the Disease increasing, they cannot lie down at all, because they are straight tormented thereby, and they continue Day and and Night strait up, and their Head bowed to their Breast for better breathing, sitting long they spend the remnant of their daies miserably. There strength decaies for want of lying down, there Appetite is lost: there is constant Thirst: little Urin made: the Urine is somtimes high, red, or Gold coloured, and thick somtimes crude and watery, somtimes not changed.

A Tympany joyned with an Ascites.

There is another kind of Dropsie Ascites, in which the belly is far more extended, and soundeth like a Drum being beaten, in which you may hear a Noise upon motion, with other accidents like the former, onely the Feet swell not alwaies as in other kinds: and this is a Tympany with an Ascites.

A Tympany alone.

In the Dropsie Tympanites only the belly swells, and is stretched like a Drum from whence it is so called. In which the stretching is so great, that being strook it sounds like a Drum and being compressed it presently riseth, nor will it keep an impression long as an Ascites doth. These breath freer then they in the Ascites, nor do they find any difficulty of breathing by lying down, neither do their Legs or other parts swell, besides there are Noises heard in the Belly, and they have pain sometimes, and are weak.

The Tympany of the Guts.

There is another Kind of Tympany in which with the aforesaid accidents, there is a stoppage, Pain and Vomiting, with the Symptoms of the Disease of the Ilion Gut and Colon.

The Belly also grows great Naturally as after Conception, and somtimes besides Nature in a false Conception, when there is a Mole with Conception or without, so that a Woman seems great with Child thereby: of which three kinds of tumors of the Belly we shall treat here shewing what they are, and by what signs they are known.

The growing of the Belly in a Woman with Child.

That growing of the Belly which is in Women great with Child, albeit being Natural it concerneth not us here, yet that we may distinguish it from unnatural, and shew that it comes not from any Disease, which women do pretend which have been irregular, and would conceale their bleeding; and that we may pronounce some certainety or probability of Conception, and that we may not mistake in this prediction which is easie, in regard the women that have conceived are at the beginning, especially very doubtful, and do exceedingly desire to know, and therefore do ask Physitians advise and send their waters, we shall shew by signs, accidents, and Experiments how you may know that a woman hath conceived.

The Constitution of a woman fit to conceive, doth with other signs make somwhat for the Knowledg of Conception. This (as they write,) is when besides the soundness of Body and Temperature, (which is thought to be best when contrary to the Mans) she hath broad Loyness a large belly not too fat especially about the Privities. But since we see those that are not such, do conceive, of what temper soever, fleshy, or lean, nay the very least like Pigmyes, we can gather great Matter from thence. We hold her fit for Conception, who is between fourteen and forty five, and hath Parents that are fruitful. Also if she have formerly conceived, there is a stronge presumption, if there be a doubt, that she hath conceived.

It is necessary that before Conception she have Knowledg of a Man, to enquire this of married people is in vain, in others Necessary, which when they will not confess it must be discovered by divers Arts, among which this is one, when there is great Suspicion, if the Physitian by the water shall affirm that she is defiled, because the vulgar people think a Physitian can tell any thing by the water; or else the Parents and Magistrates shall force confession by threats. Also if a woman shall perceive after the Use of a Man, that she kept the Seed, and that it went not out again, although through Modesty she will not declare it, it is a great sign of Conception, especially if at that time she perceived any contraction of the Womb or sucking with great pleasure, and that her Seed met with the Mans at that time.

If the Terms stop which kept formerly, their course it is a great and chief sign of Conception: by which women presently judg themselves with Child, and casting their account from the first Moneth after Copulation they collect the time of their lying in. And if they doubt their Conception, they will freely tell a Physitian when they stopped; both they which are honest, and others also though they which pretend other causes of their stopping. And although in women with Child, there is somtimes some evacuation of Blood from the Womb at some times, yet is

it be small and keep no order as the terms did it is not a sign of not conceiving: and if the woman at the time she conceived, gave suck and wanted her terms, as it is usual, and afterward though not presently the terms wholly stop it is probable she hath conceived, and for this cause when Mothers perceive it, they wean their Children.

If the belly grow bigger by degrees, no accidents of a Disease being present it is a main sign of Conception, especially if the tumor be most under the Navel, and if it be hard and gathered together, not pitting after impression as in the Ascites, and not stretched out as in a Tympany: and keeps the same Magnitude only except its gradual increase, and grows not bigger when the Body is upright as in the Ascites, and less when she lies down; nor hath a tumor as in the Ascites, suddenly fallen down when she turns upon one side; when it is thus, if it be not a false Conception, or other Tumor joyned with a true, as we have seen, for then the belly swelling violently, the Women are in Danger of Suffocation through shortness of Breath by which sometimes they die, except by Abortion or by lying, if they can attain to it, they are freed pouring forth much water together with the Child.

The growing of the Breasts, if other things be alike, is a sign of Conception, because in Diseases they rather decrease, if they have Milk it is not to be doubted, which we conjecture is made before it come from the swelling blew Veins of the breasts: also the increase of the Nipple the itching of the same, and when the circle about it is more black.

When the Child begins to move which is in the middle time of Child-bearing, sometimes sooner, sometimes later, it declares its selfe and the Mother. This Motion is not with a Noise or pain of the Belly, but by stricking one side of the belly, and as it were thrusting it which the Mother perceiveth.

There is a Loathing of some Meates sooner or later in them that have conceived; some abhor wine; some vomite contrary to custome; others desire much those Meats which they formerly loathed, albeit they are not sometimes Meates, but other abhominable things, this Disease is called *Pica*: as we said in the depraved Appetite.

There are also some peculiar accidents to Women with child: as fainting or weakness, when they are constrained to sit long in a place, as at Banquets, Churches, so that they find a straightness of Heart, and presently arise and take Air, and they must open their breasts that they may breath freely. In others that are Plethorick or evil habited, there are other accidents, as Swelling of Legs, crooked Veins in the Legs and the like.

As for the Judgement of the Urine, it is uncertain and deceitful, yet the vulgar attribute so much unto it, that they suppose a Physitian can tell certainly by only looking thereupon, and if they confess there is nothing certain therein he is taken for a Fool, and if he pronounce any Judgement he is easily mistaken, and exposed to derision, as it is with many, to whom false Urins, or Urins of Cattel. Physitians ought to be wise and circumspect, in this least they be branded for ignorance. Therefore when they cast the water, let them ask many things of the divers signs of conception, to get from the party, and determine nothing rashly, but answer circumspectly and dubiously. First if he sees a Urin like that of a sound Body, and from thence know that the courses are stopped, which they will easily confess, he may gather that it comes not from Diseases in which commonly the Urin is crude or otherwise changed, but rather from Conception, and so by some Judgement in regard of the Urin declaring soundness of Body rather then from other signs, he shall perceive the woman to be with Child, and then he was more freely pronounce something for finding out of other signs. As to other signs of conception in Urins, as the things contained, things flying therein like Locks of Wool, or rather as I have observed sometimes in women newly married after conception, that they have made Urin like Pus or Matter, for some dayes, without having any hurt in the Reins or Bladder; since these are altogether uncertain, of these alone there can be no solid Judgement but by all put together there may.

There is also a stoppage and dropping of Urin, in some women, when they are first married, which is a sign of conception: also pains about the Navel, or a little beneath presently after Copulation, and sometimes a good while after, are certain signs of Conception.

As for Experiments, by which you may know whether a Woman be with Child or no they are divers: the most usual are these, *Hippocrates* saith that if Meade be given a woman with *Aqua calestis*, when she goes to sleep, and it cause pain, she is with Child. Make a Pessary of Garlick and put it into the Body of the woman, and if she smell it or smell of it, she is with Child. But in my Judgement it might be proved by this Argument that she is not with Child, because in Women with child the Womb is closed so that the Vapor of the Garlick cannot so well ascend that waies, but in women not with Child the womb is open, and therefore they may more easily receive the Sent thorough that part. Moreover, if the Urin be like Beer both mingled with white Wine, they say she is with child.

Not only common people, but many excellent Physitians suppose they can tell whether a woman be with Child of a Boy or a Girle, but since I perceived these to be uncertain and erroneous, I willingly omit them, least I should seem to be a Patron of Errors.

The Swelling of the Belly from a Mole.

If from a false Conception, not a Child but a Mole, in the womb causeth an ill favoured Tumor, as we shewed; it will have many signs and accidents like unto a true conception, therefore it is hard especially at the first to know this preternatural conception, and to distinguish it from a Natural.

First a woman of a good Complexion, fit for conception, that lives with her Husband, may be subject to this, though seldom. And there is a great Suspicion of a Mole if a woman hath formerly had the same: and greater if often before, as we have observed some who have had them every year, some every month, and in the mean time have not been ill, but fresh and lusty.

Otherwise as in true conception so in this, the Terms stop, and the Breasts and Belly increase by degrees, afterwards if the Mole stayeth, the belly continues in the same state, and increaseth no more as in a true conception, or if it increase, there is not felt the motion, which is when women are with Child, neither is it straight but loose and burdensom, so that when the woman turneth upon her side it rowleth that way. From these they presume or suspect that there is a false conception.

As for other accidents, the Appetite is diminished and depraved, as in a true conception and other accidents are alike, and in regard this is preternatural they are more and worse, as the extenuation of the whole Body besides the belly, and the discolouring of the same, pricking of the belly, and long want of Appetite; by which we cannot pronounce certainties, nor by the inspection of Urine, to which the vulgar ascribe much in this case, and Physitians to seem more skilfull do connive thereat. Therefore it is very difficult to know a true from a false conception; untill either by Abortion, as is usual sometimes in a few moneths or by bringing forth it be discovered. And a woman is past her time, being certain by the aforesaid signs of Conception, if she brings not forth, nor have endeavours nor throws, nor other signs that shew she hath a dead child, unless this be when there is no conception, as shall be shewed, it is certain that she hath not a child but a Mole: such I have known to be kept a long time, the belly being swollen, the Courses stopt, and other accidents, add many moneths or years after they have cast them forth with Danger of life, and large effusion of blood, or kept them till Death.

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The Swelling of the Belly in women as if they were with child.

Somtimes the belly swells without conception, as in women with Child, so that they, (and others that have born Children think the same) do suppose themselves with Child. There is the same Suspicion of Virgins if this happen to them, when the belly swells and the courses stopt, because they have no other Disease or accidents which use to accompany the stoppage of the Terms, nor a Dropsie, nor other Symptoms: from want of which signs, we easily distinguish this Tumor from that in Diseases. For this is distinguished by us from that Swelling of the belly that comes from either true or false conception, if the Woman be past the years of conception, or is not come to them being too young, and here we may be deceived except they be very young or very old, but not, if she be a Virgin, and too that is difficult if she please to conceal her having had copulation with a Man.

In the mean time, because this Tumor is not so gathered together, hard and equal, as it is in Women with Child and they that have Moles, and because their Breasts do not increase, nor do they perceive any Motion of the child: and in regard there are signs of Plethory or Fulness of a bad constitution, by faintness, paleness, a pressing pain about the Stomach, and beating of the Heart, and a change of Urin into worse: and in regard other accidents happening the belly swells larger and rumbleth: by these signs we may gather that this Tumor of Belly comes not from conception, and the woman is not with child.

Also the Symptoms in this case being greater then in a Mole, shew it is no Mole, as when the time of bringing forth is past there is suspicion: and chiefly when after a large Flux of blood, the belly either suddenly or by degrees falleth down, without any Mole which somtimes is voided before that time of conception, somtimes after. And if the Effusion of blood be very great, it weakneth the Party, and leaves mischief behind, or else kills her.

Particular Extuberances are such as are in some places only, in the Superficies here and there, and in the open cavities as the Eyes, Mouth, Privities. And they are many and of divers sorts, and somtimes gathered together, or spread abroad. And they are distinguished first: thus some comming forth in the places mentioned do there remain: of these we shall speak first, others go in again, and of those we will speak last.

Those Tumors which continue in their places, as Tumors spread abroad which cannot return, as is said, are divers, some are softer, others harder.

Soft Tumors which yeeld more or less to the touch, as they are more or less extended, and being pressed they either rise presently up again, or else have an impression remaining, are divided into Tumors of the flesh, and Tumors of the Skin.

A Sarcoma or carnous Tumors.

A carnous Tumor or Tumor of the flesh, which resembleth new made flesh covered with skin and full of Veins, is called Sarcoma Sarcites, or rather *Sarcosis hyposarcosis* or excrescency of flesh: this stretcheth or hangs from the body more or less, the Tumor being greater or less round or long or otherwise; and it is sometimes burdensom by its weight, and hinders Action. This may grow in any external part of the Body, having skin as the whole body hath of divers formes, of which we have seen a baker carry one many years to the end of his life, round as big as his Head, hanging at his Neck with a narrow Root. Also not long since, there was a Child brought to me, who had a great round Carnosity with red Veins and a narrow Root, upon his Loins in the middle of the back Bone.

Proud Flesh.

After wounds or ulcers are cured, there may remain proud flesh where they were.

In the Codds there is also such a fleshy Tumor which grows to the Stones called Sarcocele, all Tumors in the Codds are called κήλαι, that is Ruptures, and the Germans call this *Carnatel* from *Caro* flesh. This is easily distinguished from the Rupture or falling down of the guts called *Enterocele*, though they be both in the Codds, because it will not yeeld to a compression nor will it be put up into the Belly, but growing by degrees (not suddenly falling down, as in the Rupture of Guts falling called *Enterocele*) it will be fixed, and remains united to the Stone, somtimes including, or covering it all over. This tumor somtimes grows very great, and hangs down filling the Codds, and stretching them, and is very troublesom with its weight, yet not painful nor discoloured.

Sarcole, or fleshy Rupture.

I saw such an old Tumor very great, full of Gristles besides the glandulous or spungy flesh, cut off by a great Surgeon, and after divided into divers parts by my Father of pious Memory.

The Sarcoma or fleshy Tumor of the Nose.

Inwardly there are fleshy Tumors in divers parts, of divers shapes, covered with a Membrane; and often in the Nose there is a little rising of flesh called *Sarcoma*, which if it increase and grow forth of the Nostrils, or hang by the Jawes, is called Polypus because it is round and long like the fish so called, and sticks to the Nostrils by a Nerve root, and by Veins, which is red also like the inward Skin of the nostrils but without pain, by which and by its softness it differs from a canker; for if this be in the Nose, as we see somtimes it is hard and pricking, and grows often very big and ends in a *Carcinoma*. But a *Polypus*, besides the filthiness of it, doth onely hinder the voice and breathing by stopping the Nose, and is seldom bred without some hurt before going in the Nose, contrary to that of a cancer. This they say increaseth and decreaseth with the Moon.

Polypus

The fleshy Tumors of womens Privities.

Sometimes there grows a carnosity in Womens Privities; and we have seen one called *Clitoris*, between the Lips of the Matrix, so great that it was as long and as thick as a Goose neck, and hung down like a great pudding, which she had all her life time, which is the cause as I suppose that many are taken for Hermaphordites, because it lookes like a Mans Yard. And this

Condyloma.

Excretcency is often in the Anus of men and women, with pain and other accidents called a *Condyloma*: as we shewed in pains.

The proud flesh of the Teeth when one grows them.

In the mouth and cheeks especially in the Gums, there is also proud flesh, such as covers the Teeth especially the Grinders, and it is called superincarnation of the Teeth; there is also in some parts of the Gums about the roots of the Teeth, a little Caruncle or piece of flesh which is called *Epulis*. I had of them at the farther end of the rank of my Teeth, which was soft, red, lank, and thick, which had but a small root, which sometimes was bigger, somtimes less, and so it continueth still, bringing no impediment.

Epulis.

In the Eyes that little flesh which is Naturally there, in the corner grows sometimes larger, like a push, which besides its Molestation itcheth, which is called *Encanthis*, as the Caruncle of Natural flesh is called.

The Tumors cutaneous or of the skin which are not hard, are so called, because they are chiefly in the skin, and lift it up with a soft tumor. These are in divers parts of the Body, as the Feet, Codds, Neck, and they stretch the part. Others are only in the scarse skin: others stretch the Veins and Arteries.

Oedema.

Among those tumors which are in divers parts of the Body, that is most ordinary called *Oedema*, which word though it signifie any tumor, yet it is properly used for that which is gathered, soft and yeelds to impression, and is without pain not discoloured, and often it is very great.

There

The oedematous Tumor of the Feet, Arms & Hands.

There is another Oedema more spreading, not so contracted which they call an Oedematous Tumor; somtimes swelling the whole Feet, and from the Knee to the Anckles, and making them twice or thrice as big as they were, like the former in other things. This we have known divers to have had without other Infirmity all their life time, differing from the Dropsie Ascites, or Leucophlegmacy, not only in the Feet, but in the Belly and other parts, of which we spake, but this is onely in the Feet, and goes no farther and is firmer, and will not pit. The Germans call these *Delchenksel*, that is oyly Legs, because they seem as anointed: somtimes the hands, and Fingers, and the Arms, have been so swollen, and have continued so long, if not alwaies. And it may be so in other parts.

Physodes or windy Tumor.

There are some tumors which will rise in divers parts, in which the skin is more extended, and will not pit, called *Physodes* from the wind that causeth them: or if they are between both, they are called windy Oedemas, and windy Physcænæ.

The Swelling of the Feet.

Some tumors are onely in the Feet; one whereof like an Oedema, is al over the feet, yet softer then that, and like the Dropsie. And this either comes from an inward cause, or in some Diseases of the feet, as the Scab, Anthonies fire, or Oedematous Erysipelas, breeds with them, and remains after they are gone. It coms also somtimes after Diseases especially Feavers, and especially about the Ankle, and the Foot, shewing it self most at Night, or after watching; and when the Patient is perfectly recovered of the Disease it vanisheth.

The Swelling of the Leggs.

We have seen the like in the Legs, in the length extended, and going no farther, at a certain time, comming with itching heat and pricking yet without pain and not discolouring, in which no pit would remain after impression; this as it come so it went away quickly, but some have been troubled with it many years at times.

Hydrocele or water Rupture.

These tumors also use to be in the Codds besides those which are mentioned in the Ruptures called *Enterocele*, and the tumor *Sarcocele*: of which one is more usual, which swells the Codds and makes them heavy, as in the Dropsie Ascites, which in regard it comes of water filling the Codds, as in a Dropsie is called *Hydrocele*, and this we call also the watery tumor of the Codds, or the ascites thereof. This is distinguished from Enterocele, because it yeeld not but is firm; from Sarcocele, because it is not from flesh but water, which is known by the touch, and you may perceive by a candle. This is not only in men but children.

Pneumatcele, or windy Rupture.

There is another tumor by which the Codds are blown up like a Bladder, so that they are transparent, if you hold a candle by them; which comming from wind, and swelling the codds is called *Pneumatocele*, which we may call the windy tumor of the codds, or their tympany, because they are stretched, and being strook sound like a Drum.

The bleming of the Codds.

Besides these there is another tumor of the codds, usually in great Colicks, which being sent downwards, make both codds swell, in which both Stones are tormented: also this happens after strong and long Exercise. This comes often, and quickly vanisheth, of which we have spoken in the colick.

The watery Tumor in womens Groins.

In Womens Groins there is somtimes a watery tumor, which is like the Hydrocele in Men, as that is in the cod, this is in the Groine.

Hydromphalos.

There is also a tumor about the Navel which being watery, raiseth the skin called *Hydromphalon*: this is seldom but in the Ascites, and then the Navel is like a Bladder filled with Water.

Hydrocephalon.

In the Head there is a watery Tumor especially in Children, and it lifts up the thick hairy scalp which is called *Hydrocephalon*.

The Swelling of the Eye-brows.

There is a tumor in the Eye-brows like a spreading Oedema, so as they seem blown up, round about, in the Diseases of the Eyes, and when they are found, which continueth sometimes long and sometimes quickly vanisheth. This some call the *Oedema* of the Eyes, which may better be called the Swelling of the Eye-brows.

The Hernia of the Throat.

The Neck hath somtimes a great Swelling in the Throat, very large, and stretched out, and will sound when stroak upon, and being pressed, it yeelds like a blown Bladder, and riseth again eaiily distinguished from a struma, because not so moveable. This tumor because in the throat, upon the rough Artery, because both are called *Bronchi*; and because it hath the same cause that Hernia or Rupture hath, is called *Bronocele* or throat Rupture. And besides the Deformity it makes the voice hoarse, and breath short, and sometimes threatens Suffocation.

Phlyctenæ

Sometimes there are Bladders or Bubbles which are watery and transparent in the scarse skin in divers parts, especially Hands, and Feet, and somtimes in the Ball of the Eye, called *Phlyctænæ*, which are insensible of themselves, but being broken especially in tender parts, or being whole if the Humor contained be sharp, cause pain: of which we spake in the pains of the Eye. There are also many such called *Hydroa*, in the Hands and else where which foreruns or accompany the Itch; which the Germans call *Shren*, from the itching, which they scratch or open with Needles, to let out the water. We have seen a clear thin Bladder rise in the Eye by the Juyce of a wild Cowcumber squirting in by chance, that hath gone away the next day without hurt.

The bladder in the ball of the Eye.

The Swelling of the breasts with milk.

Somtimes there is a tumor in the veins which bring Milk, in the Breasts which makes them swell or stretch, or gathers and is hard: somtimes with pain, somtimes with Redness about which is turned into an Inflammation when the pain is gone.

Varix.

Also a tumor may be in the Veins that carry the blood, called *Varix Cirsos* in Dutch *Krampaderen*, by which the Vein is extended and swollen, as broad as a finger, blew or black, and knotted and unequal, having Swellings in divers places, somtimes paining by the extension being ready to break, otherwhiles itching, it is often in the feet in many places, with an Ulcer near it, nourished by it, and therefore called *Ulcus varicosum*: as we said in Ulcers. And without this Ulcer, there are the same in the Feet, which as in Women with Child, return after Child-birth, or continue without hurt.

An Ulcer from Varix in the Feet.

In other places they are as in the codd, external, and then the Veins that hold it, swell and are crooked and black; or inward, and then the internal Spermatick Vessels swell, and are hoisted; and are hard to touch, in so much as they who know not the Disease suspect it to be a fleshy Rupture, or a third Stone, hence such are called triorches, or men with three Stones. This they call *Circocelen*. *Aetius* writes that there are crooked Veins in the wing of Womens Secrets; also these will be in the Eye-brows, and will somwhat hinder their Motion.

The Veins lying bare in the skin.

It also happens in a tender skin and white Body, the Veins swelling, are manifest to the sight, and do rather deform by colour then tumor without any other inconvenience. And this is often in the Hipps and other places.

There

Aneurisma. There is a tumor in the Arteries called *Aneurisma*, either when the Artery is dilated, or the Mouth thereof, as shall be said in the Causes; and this tumor beateth like an Artery, but the Pulsation is great and troublesom. When this is pressed, it partly flies back, and returns back forcibly again, as big as a fist, somtimes less, it is often in the Feet and Hands, somtimes about the Throat and Breast, witness *Fernelius*. When this is inward, then it produceth other Symptoms, as Palpitation of the Heart, which is mentioned before in Cachexy.

Hard tumors which will scarse yeeld to the touch, are known chiefly by their places: some grow in glandulous parts: some in fleshy; some in parts without flesh, some in the skin chiefly, as shall be shewed.

Kernels. In the Glandulous parts there are glandels or Kernels under the skin, which grow hard, with an external tumor, or they may be felt, if they lie deep. These may be moved any way, otherwise then a Scirrhus, and they grow by degrees.

These are in divers parts, as the Natural Glandules from whence they are named, among great Glandles they appear more, in other less: and they either come forth in many places together, or in some only.

The Tumor scorfula. These being inlarged and grown hard, do discover themselves in divers parts of the body at once. As in the Neck under the chin, where there are often many together; and they are called *Scrophulaes* or *Choirades*, because Hogs have them often in that part. They are also behind the Ears, under the Arms pits. in the Groins, and bending of the Joynts, and somtimes in the Breast and Papps of Women, and other parts swelling and hard, to be seen, or if they lie deep, to be felt. Those in other parts are usually called *Scorphulaes*. as well as those in the Neck, yet not so deep, in regard Hogs called *Scrofi*, have them only in the Neck, and other Pustles which are found in the Neck and Flesh of a Hog, which they suppose is the Leprosie, called the Meazles, are not hard Glandules but Pustles newly grown; except they be called *Scrofulaes*, because many come together at a time, because the Swine brings forth many at a litter. This Disease is somtimes hæreditary, and usual in some Countryes; in which the Glandules either remain hard like a Scirrhus, or they break and turn into a creeping Ulcer. The first is called *Scirrodes*, the second *Nomedes*, or they end in a *Carcinoma*, and are called *Carcinodes*, and bring great hurt to the Body.

Struma. Somtimes these kernels break forth only in certain places, as in the Throat, where there is somtimes one, somtimes two or three, like a bunch of Grapes, growing very great, somtimes hanging down. These they call *Strumæ*, and when they are in the Neck Scrofulaes, or if they be little, they are called Strumules; yet in regard these differ from the other, being not so many in number, and greater, neither have Hogs the like, we thus distinguish them: these we call *Strumæ*, the other *Scrofulæ*. These *Strumæ* besides their nastiness and hinderance, if they lie deep in the Throat, cause Hoarsness, and difficulty of breathing. In some Countries they are so common, that they are not accounted uncomely; we have observed that one of them choaked an Infant lying deep and invisible, and the cause was not known till after dissection. Under the Armpits, and in the Groins are also Glanduls, either hard, or swelled and hard; and these are called *Buboes*, if these be behind the Ears, upon the Glanduls, it is called *Parotis*, and both are cold and without pain, contrary to those of which we spake, in pains: for in these of one colour and without pain, there is no Inflammation or Heat, except they come to an imposthume, out of which, as we shewed concerning a cold Impostlume in a fleshy part, there comes no Pus, but other matter, as we shewed: out of which kind of hard *Parotis*, ending in an Impostlume, and after in an Ulcer we have seen Stones come forth.

Bubo without pain. *Parotis.*

To these hard Glandules we refer the stones grown hard: which sometimes grow so big that the Codds hang like a bag filled and stretched out. This they call the Scirrhus of the Stones by reason of its hardness; but we rather refer it to a glandulous tumor: as we shewed that some Glanduls were called *Schirrodes*.

The hardnest of the Stones.

Scirrhus. There is a hard tumor in divers fleshy parts of the body that shineth, and is so firm, that it will not be moved from the place, sometimes more large and extended, and somtimes lying deeper of one Colour and without pain, called a Scirrhus, and somtimes it is in the beginning, and somtimes confirmed. This often follows Inflammations, sometimes it begins of it self, and grows by degrees: somtimes it may be turned into a cancer, but we suppose that they have mistaken a Cancer not yet ulcerated for a Scirrhus, being like in hardness and shape, and so they were deceived, supposing that when it brake, a Scirrhus broke and ulcerated.

The scirrhus and glandulous Tumors of the belly.

We have seen hard tumors about the belly, somtimes many have been together, making the Belly rise like a Dropsie, or in women as if they were with Child, from which it is discerned easily by its inequality; and the continuance of it at length will shew that it was none of them; some have been so all their lives, and without any great inconvenience. These we refer to the Scirrhus, except they be Glanduls in the cawle, which stretch out the Belly.

There are also other tumors in the Belly, which come from Tumors of the Bowels.

The hardnest of the Liver, or Spleen makes a distention of the Hypochondria.

In the right or left Hypochondrion, or side, there is distention of the Ribbs rather then a tumor, when the short Ribbs are thrust out by a Scirrhus or hard tumor of the Liver or Spleen. In the middle seat called that of the Heart, where the Ribbs divide, these tumors mentioned, (if in the Liver, in regard it reacheth so far on the right side) may be felt: otherwise we can neither feel nor see them, except by other Diseases that accompany them; in the Description whereof we have mentioned these Tumors, these are a stretching and heavy pain about the Hypochondria or short Ribbs, the compressive pain of the Heart, the Jaundies, Cachexy, Dropsie, which if they swel the whole Belly, hinder distinction.

The hardnest of the Womb causeth a tumor in the lower part of the belly.

In the lowest part of the Belly under the Navel, there is sometimes a hard Tumor, that comes from a Scirrhus in the bottom of the Womb: of which we spake in the Inflammation of the womb, from whence it comes.

The tumors of the Belly which cause pain, have been spoken of by us concerning Pain; as that which is above the Navel, between the Ribbs and comes from the Inflation of the Stomach, and other in other parts of the belly, comming from the distension of the Guts, as that of the Colick, when there is a Swelling on the left side against the Navel: as we shewed in the Colick and pains of the Stomach.

Somtimes a tumor like a Scirrhus is in some fleshy part of the Body, yet not so hard, but growing old, it turns to an Impostlume, not that which causeth pain and follows Inflammations, but which is without pain and continueth long, and is open, sending not forth Pus or quittour, but other matter, which if like Tallow is called *Steatoma*; if like Frumenty, Atheroma, if like Honey Meliceris. There are also other tumors out of which come matter like curdled milk, or like a Glandule, or a Nail, a Bone, or Hair, or like other things without the Body, as like Clay, a sandy stone, or hard stone, like a coale, the shells of fruit, pieces of wood, which the People think came in by witchcraft:

Steatoma, Atheroma, Meliceris what they are.

these tumors and impostumes have no proper and peculiar Names, and all of them, as they may be in many places, so sometimes under the Tongue, like that Tumor called *Rana* a Frog, but without pain, from which being turned into an Impostume, as from that which is with Inflammation, of which we spake in pains of the Mouth, sometimes a stone hath come forth. These tumors usually rise in the Head, where the skin is hairy, especially such as have soft Matter, as in other Creatures which are all hairy. These from their divers forms are called *Testudo* and *Talpa*, that is a Snail or a Mole.

The Rana under the Tongue with Inflammation.

Testudo and Talpa tumors in the Head.

Outwardly in the Habit of the Body where flesh is wanting there are tumors in divers parts, both in and out of the Joynts, there where the Bones have nothing but skin to cover them. In the Joynts where the Tendons, Ligaments and Nerves do meet, about the Knee, Elbow, or other Joynts, there riseth a tumor sometimes called a *Ganglion*, which tumor growing in these parts, being uneven sometimes larger, sometimes over the whole Joynt: is not so hard, yet will not yeeld; neither is it without sense, but being strongly pressed is sensible of pain, neither is it so fastned but it may be moved, hindering the free motion of the Joynt, and sometimes knitting the Joynt, that it neither can move, or if it do, the motion is imperfect: and if it be in the Knee, on either side, or in the Hand, where this Ganglion doth often grow, covering all the Joynt, the Patient can neither stand nor go well, or without a staff, because his Feet will not reach the Ground.

Ganglion.

There are other tumors of the Joynts called Nodes or Knots: which continue a long time in the Fingers, and Toes; from whence the hand Gout, and foot Gout are called Nodi; some of which are hard like stones, other soft, and these spread beyond the Joynt sometimes, and are in other parts, as we shewed in the Joynt Gout, and how they bring pain, and hinder motion.

The Knots upon the Joynts of men in the Gout.

There are also very hard tumors upon the Bones, which cannot be moved from them, as if there were a new Bone grown to the former. These the Germans call *Uberbian*, that is bone upon bone, being they are as hard as the bone. These grow about the Fore-head, Temples, and Shinns; in the Wrist, and small of the Leg and the like. These although without pain, yet if they press upon the parts adjacent, cause pain and trouble, if they are in the Joynts, they hinder Motion. And these are either such as grow of themselves, or accompany a Disease, as the French Pox, Head-ach. In which through pain they breed, and of which we spake formerly.

Hard Knots upon the Bones.

The Nodes in the French Pox, and Head-ach.

The Callosity or Hardness.

To these a Callus may be referred, such as comes after Bones are broken and set again, which buncheth out above the bone, and if it reach to the Joynts, it hinders Motion.

The hard Swellings of the Nails.

There is also a hard Swelling upon the Nails, by which they grow thick, (as we shewed in Magnitude increased) and also uneven, and are like young Nails, as I have seen.

There are also hard tumors in the skin called cutaneous. The first kind whereof is a hard and thick skin, called *Callus* and *Tilloma*. Sometimes larger, sometimes less, spread abroad less or more, or lifted up, blacker then the other skin, because thicker, being without sense or pain. This is often in the Palm of the Hands, and soles of the Feet, and between the Fingers and Toes, and is exceeding hard, I knew a Smith whose Hands were so hard that he could touch hot Iron, and hold it some time, without harm to his Hands, by reason of the Callus.

There is also another Callus which is like a skin upon the skin, called a Scar, insensible and whiter then the other skin, and more firm, without Pores or Hairs, sometimes bigger, sometimes less, sometimes above the true skin, sometimes lying deep, sometimes like a white Spot. These come after wounds and ulcers cured.

A Scar.

To these may be added the unevenness of Face, which is left after the small Pox, with pits like a Honey-comb, by reason of the Scars that lie low: these are not Extuberances, or Risings or even with the skin as others, yet are fit here to be mentioned.

Pock-holes.

Also that hole of the Navel left after the closing thereof at the Birth, if it lie too deep by reason of the Callus, by which it grew together, lying too deep: is here to be mentioned.

The Navel pit.

And also the Swelling of the Navel, not that which is in dropsie and ruptures, but that which comes from an increase of the Callus.

The stretching forth of the Navel.

There is a little tumor called a Wart, as big as a Pease, above the skin, hard without sense, and narrow, about the Root, by which as a stalk it grows to the skin. And if it hang far out, it is called *Acrochordon*, or a Wart that hangs by a sinew so called, rather because it may be tyed with a string or corde, then because it hangs like a corde. If this be discoloured like Tyme, or the Herb Thyme, and uneven, it is called *Thymion*. These are in divers parts often in the Hands and Feet, and many together yet at some distance and sometimes united. These being unseemly and the worse in the Face, from whence *Cicero* had his Name, because his Wart there was as big as a Pease called *Cicer*, do also molest sometimes and hinder.

Warts.

Acrochordon.

Thymion.

A fixed Wart, is called *Verruca sessilis*, because it sits fast, and comes less forth then the other, like a Lupine having a broad Root fast to the skin, otherwise like the former, only when it is hard thrust upon, it feels a pricking. In this oftentimes, especially in the Face, groweth a hair or two.

Verruca sessilis.

Like to these is a corn in the Feet or Toes called *Clavus*, both because it hath a head like a Nail, and also because being pressed, it pricks like a Nail. It is very troublesom, and hinders going, the Germans cal it *Egerstenany*. because it is like a Magpyes Eye.

Clavus.

There are besides tumors in the Head especially called *Vari* or *Jonthi*. They are hard and callous, moist at the top, and in the Face sometimes, and Beard, and then called *Psydracia*.

Vari or Jonthi warts in the Face so called.

There are other hard tumors in the Eye-brows, like Warts, one whereof grows upon the Eye-lid, Hordeolum, because like a Barley corn, without sense, itching or red. Another grows to the upper Eye-brow, and is hard called *Grando*, because like a Hail-stone.

Grando.

That tumor which comes and goes is called *Cele*, which word is applyed to other tumors, called Ruptures from the Cause; it is in Groins often both of Men and Women. It is at first small, of the Colour with the other flesh, sometimes soft, sometimes hard and uneven, being pressed it goes back, and returns, and may be thrust forth by straining and holding the Breath: this is called *Epiplocele*, when the Cawle is broken, and *Bubonocele* from its likeness to a Bubo or Bubo *herniosus*, or *Hernia inguinalis* that is a Rupture in the Groyne.

If it come from the Guts falling down it is called *Enterocele*, though this tumor doth not rest in the Groyne, but falls into the Codds of Men, the Colour of the skin not being altered, sometimes wrinkled. This tumor if it be pressed, or the party laid upon his Back, vanisheth; and after returns again, and the sooner if it be forced by holding the Breath and straining.

Women have sometimes the same in the Groyne, as Men have

have in the Codd, and it will fall downwards into a great Tumor, and it will go and come again as that of Men.

The Hernia or Rupture of the belly, or Omphalocele.

There are the like also in the Belly and other parts, and especially about the Navel, which is called *Omphalocele*, when the Navel sticks out somtimes as big as a nut, somtimes as an Apple: and sometimes there is a Tumor in the part that hangs down like a bagg, all these tumors go in by pressing and lying down, but they will return, except they be prevented. In these Tumors mentioned, sometimes there is no pain, nor impediment besides the tumor, somtimes there is great pain at the beginning especially in the Groyne, when it falls from thence into the Codd, then there is a tearing and pricking pain. They are commonly bound in the belly that have them, and if the tumors be long out, they will vomit up their Dung, as we shewed in the *Convolvulus* speaking of Vomiting.

To these tumors that come and goe may be referred those that come from the windy Cramp in the Calves of the Leggs, and other fleshy parts with great pain, rising and falling again: of which we spake in Convulsions.

The Causes.

The immediate Causes of all Extuberances, or general Swellings, are from the Humors, Seed, Milk, or Blood, or Water, or Wine either single or mixed: the Cause of some tumors is the Dislocation of some part, as we shall shew.

The Parents seed is the Cause of fleshy Tumors, Strumaes, Scrophulaes & hereditary warts

As the Seed is the Cause of Deformity, and Discolouration that comes Naturally (as we shewed before) so is it the cause of divers Tumors, which are hereditary, as *Sarcomata* or fleshy tumors, *Tubercula* or Pustles, soft or hard, and chiefly of *Strumae*, or *Scrophulae* which are kernels hardned in the neck. These we rather suppose to have come from the Parents, then from evil diet. Also those Glandules of kernels which are in divers parts of the Body, and end in cancerous Ulcers, come often from the Parents Seed: and it appears, in that where these are frequent in divers Countryes, they will never marry til they know certainly that neither party is infected therewith. And as all small tumors may come from the Parents, so may Warts and Moles like Pease, such as *Tully* had in his Nose, and thence he was called *Cicero*, and this is from the Infection of Parents Seed: as we shewed concerning Deformities.

Imperfect Seed is the Cause of the Tumor of the belly called Mola.

As when the Seed is perfect there is a Child, so when it is imperfect there is a Mole or the like, and this will grow and swell the Belly preternaturally. This defect in the Seed is hard to be discovered, but if there be a production of flesh with Vessels or with Membranes, the fault is in the Man, except there be also a Distemper in the Womb. And seeing there is a Navel-vein, this ill shaped Lump must increase, and the Mother must find it Nourishment by her Courses, and she must have Milk in her Breasts: as when she is with Child.

It is not probable that a Mole should come from other Causes as only the Mothers Seed, or Terms, or from the Blood that nourisheth the Womb, because nothing can be gotten without the commixion of both Seeds; neither can it be from the terms, which though they may nourish, yet can they not beget either Child or Mole; and if that blood which nourisheth the womb produce any thing it must be a *Sarcoma*, or fleshy tumor, which grows to the womb, rather then a Mole which is loose and only hangs by Veins, as we shewed in the Causes of *Sarcoma*.

That no Mole comes from wind, is manifest, for if wind be inclosed in the womb, it will rather puff it up: and we have shewed that the womb cannot be so blown up in the pains of the womb.

The Juyce that nourisheth the parts of the body is the Cause of some kinds of Tumors.

That nourishing Juyce which is made of Blood dispersed into the parts, and resembling them and doth nourish them, as when it is good and laudable, by nourishing the substance it keeps it in a good temper, so when it offends in quantity or quality, it produceth general or particular tumors accordingly: and that two wayes, either by producing another substance in the part, or by increasing the part.

This Juyce that nourisheth the parts, produceth divers tumors, by getting as it were new and superfluous substance in the parts which grows in them or to them; And this is when it offends more in quantity, and then besides its nourishing of the parts, it produceth somthing superfluous not unlike the part, softer and harder: or when the Juyce is too thick for the Nourishment of the part, then it produceth a harder tumor: the reason whereof shall be declared.

The juyce that nourishes the fleshy parts produceth fleshy Tumors, either by the plenty or by the thickness thereof.

The nourishing Juyce sweating through the flesh is the cause of Sarcomata or fleshy tumors, and proud flesh, in the Nose, Gums, and elsewhere.

The Juyce which sweateth out of the flesh, for want of tunicles by which it is confined, and by which the Mouths or the Veins that bring are stopped, if it grow to the flesh, it produceth *Sarcomata* or fleshy tumors; as in Ulcers full of flesh and not skin'd over, there is an excrescence by reason of the abundance of Juyce; or if the skin of the Nostrils be eaten off with Ulcers, there wil be a *Polypus*, and if the Gums be seen there will be Epulis. Fleshy tumors called *Sarcomata*, are produced inwardly, when the tunicles of fleshy parts are divided, and the Juyce is diffused out of them: as from a Contusion, by which the Mouths or the Veins are a little opened, though there follow no other hurt or Ulcer, yet there wil somtimes arise little tumors from a Contusion of the Spermatick vessels, in the cod, when the juyce being out of the vessels, causeth somtimes a sarcocele or fleshy rupture.

The more plenty of Juyce there is, the sooner is a Sarcoma produced. And this is occasioned by Plethory or attraction of Blood to some part, friction though the part be not hurt, or by uneasie sitting or riding may cause a Sarcocele, the Blood being continually attracted to the part; also from moderate Venery, the Vessels being dilated there will be a flux of Blood: And if the part be disposed to receive it, as being loose, it is caused sooner. Hence it is that the Gums grow so rank, and the little Caruncle in the corner of the Eye, especially when the Gums chew much and the Eye is rubbed for itching.

Thick Juyce is the Cause of Scirrhus, Atheroma, and Steatoma, and Meliceris.

Somtimes harder tumors then *Sarcomata* come from thick Juyce, simple or Compound, as that called *Scirrhus*, daily growing harder and fixed: hence are they many in the Belly, if not glandulous. And other hard Tumors which are not so fixed but at length turne to Imposthumes, in which the Matter is divers according to the diversity of the Cause, yet will they not break as those comming of blood, or suppurate, but as we shewed turn into a solid substance joyned to the flesh, or it turns to a Humor included in its proper compass, and goes away by Maturation.

And this thickness of nourishing Juyce, that produceth these tumors, comes either from the blood, or from the Juyce. And so a Scirrhus may come, of an Inflammation, not because the blood grows hard for want of Suppuration as some think, or by the Application of cold things, for then it would rather putrifie and corrupt; but because the blood being discussed by a violent Heat. the Juyce of the part inflamed is made thick and hard: besides this Cause which is thickness of Juyce, there is another which is when the Nourishment of some other part which requires that which is thick, is carried to a fleshy part. And this is proo-

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ved, in that in Impostumes comming of those Tumors you shall find something like the substance of other parts, a hair or a Nail, or like a Bone, or a Kernel, which could not be but from the Juyce which nourisheth the parts; as when it resembles fat, you may suppose that some Juyce that was to have nourished the fat parts miscarried thither: or when it is like Furmenty, or Honey it shews that the fleshy juyce is not turned into Matter, as in hot Impostumes, but into a more thick Humor, and if it be more burnt, and grow more earthy, it will resemble coates and stones. If these be included in their proper Membrane, and that be included in membranous Juyce, they will grow alike as hath been said: which as they may be from a Tumor turned into an Impostume, so that the juyce which belongs to another part which is more hard, may cause a Schirrhus. And if it turns to a Cancer, there was some Venom in the juyce. And we think these more probable Causes then Flegm or Melancholly, which most affirm; for if a tumor should arise of them, it would not be so constant, but subject to Corruption: as we shall shew in other Tumors which they suppose to come from those Humors.

The nourishing Juyce being too thick, causeth hardness, or Scirrhus of the Liver, Spleen, & Womb.

Also the internal Tumors which are hard, and in the Liver, and Spleen, and Scirrhus, which you may see, or feel under the Ribbs, and that in the womb as we said of the external parts come from Inflamation aforegoing or thick juyce, as we shewed in the cause of Ascites, Cachexy, and Jaundies, comming from these tumors, and Scirrhus, and in the Inflammation of the womb, we mentioned the Scirrhus thereof, which groweth sometimes; as the womb being small, grows larger after Conception.

The thickness of nourishing Juyce, is the cause of glanduls under the Ears, & buboes, Strumae, and Scrophulae.

In Kernels, the nourishing juyce being mixed with other Humors, or by its plenty or thickness, being alone, produceth Hardness, and Tumors, some whereof turn to Impostumes and ulcerate, as Parotides and Bubones, being hard, or such as are turned into a cold tumor, and Strumas in the Neck, which commonly continue hard, and Scrotulas which turn into a Scirrhus, or malignant Ulcer.

The cause of this abundance and thickness of Juyce, is the same with that of a Scirrhus, and other hard tumor, which being thicker, nourish Glanduls rather then fleshy parts, makes them sooner swell and harden, or if it be taken from other parts, it causeth hardness where it should not be; and if the Matter be included in a Membrane or Coat, it is of the same Juyce. We deny not but Flegm and other humors may be mixed therewith: but we cannot affirm that Flegm, or Melancholly alone can produce these tumors. But if Rheum flow from the Head; or Blood come to the part, there may be a Swelling but not a Hardness: and if it be mixed with this Juyce, we say it causeth the tumor sooner to impostumate. But if water be mixed with thick juyce while this grow thicker, and the earthy part of the water dryer, it may produce stones, as we shewed in the knots of the Gout, and in the stones which we said we found in tumors behind the Ears. And if any malignant Humor be mixed, the Kernels will be worse, and easily ulcerate; as Scrophulas, which are in many parts of the Body. In which if the Matter be corroding, the ulcers are called *Nomodea*, if malignant Cacoethea, and if there be Venom, they are Cancers. The Original of evil Humors is the same with that of malignant Ulcers whereof we spake. Wherefore some people are swollen in their Necks with Strumas, in those places, especially where they drink Snow-water; as the Inhabitants of the *Alpes*. And this is not likely, because it is in some places only of that Country, as in the lower parts of *Valesia*. But it is rather to be imputed to the natural disposition of mens Bodies in those parts, which is the cause that they are so common there Parents Seed being so infected, rather than water drinking: as we shewed in the cause of the Seed.

The Juyce that nourisheth the Membranes is the cause of a Gangleon.

When the thick Juyce nourishing the Tendons, Nerves, Membranes, and Ligaments aboundeth, it begets a hard tumor in the fleshless parts of the Joynts called a *Ganglion*; when it is glewed to these parts that are exercised, and produceth a like substance, especially in the Joynts, as in the Ham by reason of the violent motion of the Knee. And it may come at the curing of a Wound in any other part, when the juyce aboundeth. And it cannot be from Flegm, Excrementitious as they call it, being it is such a Nervous, firm and solid substance, no more then a Callus or a Node, or a Broncocele, or Tumor in the Throat, which they say comes from Flegm. This is of divers kinds, and comes from divers Causes: as we shewed in the windy Cause.

The Juyce which nourisheth the skin is the Cause of a hard skin.

When the nourishing Juyce aboundeth in the skin, it causeth the hardness called *Callus*; as when by labour it is worn although not quite taken off, yet somwhat alwaies is taken away, and it is made thin; and then the nourishing juyce being drawn thither more by the chafing of the part, doth require and make new skin, till there comes a Callus as in the Hands and Feet. Mechanick men have sooner hard Hands from the Instruments they use, which causeth Blisters at first by separating the scarse skin from the true, and attracteth the nourishing Humor, which joyns to the skin and makes it hard.

The Juyce that nourisheth the skin is the cause of a Scar.

The Juyce that nourisheth the skin gleweth together the Division which is made by a Wound or Ulcer, and fills up the place, and makes a Callus instead of a true skin called a Scar, which differs from the skin, because it is insensible, and more hard, not porous, nor hairy. And it is larger or less as the wound was. And if the Juyce abound it grows higher then the skin if not even. And if the Ulcer were hollow and have a Scar to heal it up before it be filled with flesh, it is like a pit in one or in many places as in the small Pox.

As it is in the Navel, if the hole thereof which sent out a Cord in the Womb, which is taken away after Birth, grow sound and skin over below, there will be a pit; but if it grow up there will be a Callus even with the skin, or if it grow too high, the Navel will be thrust out.

Nourishing juyce in the Pores is the cause of Warts and Cornes.

If that Juyce which is ordained to nourish harder parts get into the Pores, and makes Warts and Cornes; which Juyce may come from that which nourisheth the skin, for as it causeth there Hardness, Callus, and Scars, so getting into the Pores it may take root and grow forth as a Wart which hangeth down, or is fixed, and as a Corn in the Feet, where being pressed with going, while it grows, can go no farther, and there is pain, by the compression when the flesh underneath is pricked. The largness of the Pores, is the cause of this, when they should be so straight that they should receive nothing but vapors for sweat. This comes in divers places, especially in the Feet, where the skin is much pressed in one place, and so the Pores made more large, which causeth a Corn, which hath a hard skin for the same cause. And Warts come in the Hands from external Injuries, and hard tumors in the Eye-brows, called *Hordeola* and *Grandines*, from the rubbing of the Eyes. The like may be from the Juyce which nourisheth the Hair, if it be too thick, the Pores, and this Juyce may cause a Hair in the Wart make it grow longer; it is not likely that any such should come from Flegm, which may resemble the substance of the parts of the Body, where they are much less, can so small a thing as causeth a Corn or Wart come from a Defluxion? Neither could they come from Flegm, if they were Infectious, as *Rondoletius* thinks in regard the juyce may have malignity: as we shall shew. And if they were hereditary, they rather come from the Seed then any preternatural Humor.

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The nourishing Juyce in the Pores, is the cause of Freckles.

From this thick Juyce which is for nourishing other parts when it gets into the Pores, there arise hard Pustles called Freckles, or Pimples, as Warts; which when in the Head or Beard are called *Psydracia*. For the skin being thicker, and harder there, is nourished with thicker Juyce, which coming into the Pores in great quantity, causeth Pimples, and if it be spread in the Face, it causeth the same there, by Reason of the Loosness of the part. These are fixed if they come only from this juyce, but if any Excrementitious Humor or Matter be mixed, then the Pustles will run, and turn to little ulcers.

The juyce that nourisheth the Bones, is the cause of Noder and Callus.

Also in the Bones the juyce that nourisheth them causeth Nodes, which as it happens also in the Flesh being laid bare, so here in the Bone, when the Periostium or skin thereon is eaten away; and the juyce of the Bones which the skin useth to confine within its self to the Bone, growing forth causeth Nodes like to the Bones. And as these may come by external violence, as in Horses Feet, so in Men also, and by other Causes sometimes, which are malignant, as the French Pox: as we shall declare when we treat of that disease. Also this juyce may produce a tumor; for when the Bones are broken, which wil cause abundance of juyce, there will a Callus grow to glew them together, and it will grow out from the Bone and be like a Node.

The Juyce which nourisheth the Nails being too thick or too much causeth the callosity of the Nails.

In the Roots of the Nails there is Juyce which giveth them Nourishment, and if it be too much in quantity, it doth not onely make them too thick which is unseemly; but if it be thick withall, it causeth uneven Swellings. Now the cause of this abundant juyce, among the rest is this, when it is drawn thither by a violent Exercise of the Hands or by hurt: as we shewed. And if this juyce be too thick, or be mixed with the Juyce that belongs to the Bones adjacent, it makes the Nails to be too hard and thick. And if it be mixed with other juyce which is evil: it procures other inconveniences besides hardness, as shall be shewed.

Crude juyce nourishing the body, is the cause of Leucophlegmacy.

The Juyce which nourisheth the Body, causeth enlargment by encreasing the substance thereof; and if it be crude and unconcocted, which long nourisheth the body instead of that which is concocted, it makes the body soft and faint and swollen, and is the cause of Leucophlegmacy so called, because it is made of waterish juyce or flegm, which is water congealed.

And the Cause which breeds this crude juyce is the same with that of a Cachexy, which comes from the same juyce: as we shewed, when we told you, that it came from crude Blood which produceth such Juyce. And that it came either from the Foot, or from some Distemper of the Bowels, as the Stomach which leaves the Chylus imperfect in the first Concoction, or from the weakness of the Liver and Spleen, from Distemper or other Diseases, as Obstruction and Hardness, by which meanes the blood is not sufficiently wrought in the second Concoction. Hence is this evil juyce so plentiful in the Veins, which nourishing the Habit of the Body, first breeds a Cachexy, which useth to go before a Leucophlegmacy, and produceth it certainly if the matter increase. And we have shewed how the serous or watery Humor mixed with the crude produceth the same.

The crude, nourishing juyce, either alone or mixed with water is the cause of the tumor called Oedema.

Crude juyce gathered in some parts causeth the Tumor Oedema, which is spread abroad, and in which the substance of the parts where it is, seems rather to be enlarged soft and swollen, then filled with Excrementitious Flegm, which they say is the Cause, and therefore is harder to be cured. Also when Water is mixed with the juyce, it produceth tumors that are more soft and watery, which we call serous Oedema's, these are especially in the Thighs, which make them look like a Dropsie.

We have shewed the Causes of these last in the Treatise of the serous Humor; but for the cause of those which come only of crude juyce, sometimes it is the same with that of a Cachexy and Leucophlegmacy; if it come to the part through the weakness thereof; sometimes only the evil constitution of the part, by which it doth not so perfectly turn the blood brought thither into its self, but leaves it crude and imperfect, may be the Cause; if the part be cold, weak, looser or fainter, from Diseases or hurts received.

Plenty of milk is the cause of the Swelling of the breasts.

Abundance of Milk in the Breasts causeth a Tumor which distendeth the whole Breast, or some part thereof wherein it is gathered. The plenty of Blood is the cause of this plenty of Milk; but chiefly the retention and collection of Milk already made in the breast, commonly after Child-bearing which is the time of giving suck, in which if Women give not suck, as some do not, they are subject to swollen breasts, sometimes though the Infant do suck, yet in regard it cannot suck them clean by reason of the continual increase of Milk, the same may happen. Women when they have weaned their Children, are troubled with this some few daies after. And they seldom have it before they are delivered, albeit they have Milk, and their Breasts grow bigger. Some say that not onely the abundance of milk but the curdling thereof is the cause of this Tumor of the Breasts, which if so, the Tumor would be rather gathered and hard, as sometimes it is, in that place wherein it curdleth, rather then a general Swelling, and this would be so because the Milk is out of its proper Vessels, and then in regard curdled milk as clodred Blood cannot be long in a part without corruption or Suppuration, nor can they easily be discussed; this tumor would quickly be an Imposthume.

Blood filling the Veins is the cause of crooked Veins called Varica.

We shewed in pains, how Blood carried out of the Vessels caused hot Tumors with pain. And sometimes when it is in the Vessels it causeth tumors, as it is in the Veins or Arteries; if in the Veins, they are swollen and crooked, by too much filling and dilatation, and sometimes they are in some places more swollen like baggs or Nodes stretched forth, made clear and transparent through dilatation, and the Colour of the Blood is seen through, and they appear blew and black, straight or crooked, and if they be so stretched, that they presse the adjacent Nerves, or if the Matter contained in them do offend the Nerves there is pain. And the blood will do this sooner in those parts which are dependant, and from whence it cannot so easily ascend as in the Leggs, where these Varices are most usuall and large: as from the same Cause, there is the tumor called *Circocele*, in the inward Vessels of the Codds, but this is seldom, because the Blood will not come so violently into such narrow Passages, but by some extraordinary occasion. Moreover, Blood sent into other Veins of the skin gets Varices, especially where there are many Veins as in the Scrotum, or Cod, and the Eye-brows and the like. But these are different as the Blood, for if that be temperate and pure they are less, and only are offensive by their being stretched forth: but if the Blood be hot or foul, or mixed with Choller, they burn, and are more troublesom, and sometimes have an Ulcer at the bottom, where the Blood settleth, as in the Legs is usual if the matter be sharp and it will be a creeping, corroding Ulcer, which many suppose comes from a Melancholick Humor, as all other Varices, because they look black, when pure Blood seen through the skin may seem so, & the rather when it is foul.

Now the reason why the Blood is carried so fast to that part, is from the part, and from the blood it self: as when there is too much Blood as in a Plethora, and Women with Child, by reason of the Terms stopped in the Veins of the

Womb

Womb, and being more then will nourish the Child, hence it is that they have these crooked Veins in their Legs, because their blood being stopped is carried thither, that is into the Legs, which Veins consent with the womb, as appears by letting Blood in the Foot to provoke the Terms; and after they are delivered, the blood being purged by the Womb as is usual, these veins fall down, except they be too much dilated. Also blood sent by the Veins into the extream parts by reason of its evil Juyce, produceth Varices or crooked Veins, and sometimes ulcers let the Blood be what it will, it produceth Varices by its violent motion, therefore they are chiefly in the Feet, by reason of much Exercise But hard travail and long and great throws in Child-bed, are the chief cause of Blood flowing into the Feet, which produceth these Swellings of the Veins. Also immoderate Venery, because it forceth Blood violently into the Spermatick Vessels (which hath been sometimes known to come forth instead of Seed) and dilateth them, may be the cause of the Swelling called Cirsocele, which is of the Veins in the Codds. And those Swellings come the more when the part is weakned, and fit by its loosness to receive a Defluxion: and when the part hath more and larger Veins then others, or when it is dependant and lowest as was said.

Blood in the veins of the Womb causeth the belly to swell as if the woman were with Child.

There is another tumor rising from Blood gathered about the womb in the Veins thereof, and stretching them out: which causeth that Swelling in women which we shewed, made them look as if with Child before Conception. And this comes from Blood, because the Courses have long stopped, and it will not be dissolved but by a Flux of Blood. And it appears that this blood doth not cause this tumor by getting into the Cavity of the Womb, and by filling it till it stretch, because the womb is fleshy and Nervous, cannot be enlarged by any Humor, as a Membrane, and it cannot be enlarged but by the growth of a Child or Mole: as we have shewed. And if it were filled with blood, it could not be kept there long, and would be corrupt and putrified, which it doth not, because alwaies it comes afterwards forth, thin: and though some Clodds come therewith, it shews that they grew so by stoppage at the first, and caused this Swelling. Now from hence we conclude that this Swelling of the Womb came. Because blood being a long time retained in the Veins of the Womb, doth not only enlarge them externally in the outside of the Womb, and make them crooked and swollen; but these Veins in the substance of the Womb, which at other times are small and scarce apparent, being now filled and dilated by degrees, do lift up the substance of the womb, and make it larger: and so the Swelling of it, and the stretching of the veins external, causeth this Swelling of the Belly, which when the Courses flow, and the veins grow empty, is asswaged except some other Disease happen, as Cachexy, or beginning of a dropsie, when the Belly is so swelled with wind or water, (as we have known it in Women with Child) and then the tumor is altered, and will not be gone with bleeding.

I have observed in two full bodied Women, this gathering and stopping of Blood in the Veins of the Womb, which caused a Swelling of the Belly with distension, and passing up, or inflation of the Breasts, (as in Women with Child) whom at first I judged to be with Child, which was their Hope, but not long after, the Courses flowing plentifully, they were freed both from Swelling of Breasts and Belly.

Blood getting out of the Arteries under the skin is the cause of the tumor called Aneurism.

Blood in the Arteries causeth that beating Tumor called an Aneurism; which they suppose to be from the dilatation of an Artery, as the other was from the Vein. And it was formerly declared, that this only may be in the inward Arteries, and that from an internal Aneurism, Pulsation of the Heart and Arteries may proceed, when we spake of that Disease. But since the Branches of the Arteries do not spread themselves to the skin, nor are they fastned unto it, as the branches of the Veins are, this Swelling cannot be like that of the Veins, except by chance an Artery do so swell in some part near to the skin, that it appear external and cause Pulsation. And if this be so, it must come from the same Cause from which we told you in the Palpitation of the Heart, the internal Aneurism did proceed.

But an Aneurism doth not come only from the Dilation of the Artery, while it continueth sound and whole, but often, though not alwaies, if it be external, it comes from some manifest apertion of the same: For then the thin Blood which comes out of the Artery, gets under the skin and makes it swell, and there makes a Hollowness into which the Artery disburdens its self, as it is wont to do in the Brain Naturally, so here preternaturally, by throwing forth the Blood with the Spirits in its Diastole or Dilatation, and drawing it again in the Systole or Contraction of it self, and this causeth the Pulsation in this Tumor.

Now the opening of the Mouth of the Artery, is the Cause of this Bleeding, when being dilated by the Causes mentioned, it doth not only swell, but makes way under the skin for the Blood to get forth, by opening the mouth through the Distension.

Or if the Artery from the force of that spirital Blood be so compelled, that it is stretched forth and opened; or be hurt by any external force, so that it be broken externally, it may send blood under the skin: as we have declared.

But it is apparent that this happens not from an Artery broken, or by stretching opened internal, but external; in that the Mouths of the Arteries which end and shut up the same, have their termination in the extremities of the Body, where the Arteries end: and if an Artery inwardly hurt or opened should bleed, the Blood would fall into the Cavities of the Body, neither would it produce a Tumor, such as many times is inward, also when the Artery is onely stretched.

Moreover that an external Aneurism comes often from the effusion of this Arterial Blood by the Causes aforesaid, under the skin, and not from the dilatation only, it appears in that the Tumor is round rather than long, like the Artery dilated, and not wrinkled or twisted like a Varix.

But it appears chiefly by an incision made in the skin swollen, that the blood was lodged there, because it leaps out suddenly, and often in such abundance, that, (as it hath been observed) it could no waies be stopped, but the Patient hath bled to Death; and that this Aneurism came by the breaking of the Artery appeared by the leaping, and in regard the Pulsation was such, and it had long continued and was grown very big. We also saw a woman loose a great deal of Blood with great Pulsation from the opening of a Vein, which could scarce be stopped, although many Remedies were applyed: having a beating Tumor after the wound was healed, which declared it to be an Aneurism. And this came, either because the Artery was cut by chance, in the fleshless bending of the Arm, where the Tumor was, by reason of the blood ebbing and flowing under the skin, after the wound was healed in the skin, and not in the Artery: Or because the Mouth of the Artery was fresh dilated, before the incision was made, and that caused that when the skin was cut there was a Flux, which caused a Tumor after the cut was healed. Neither can an Aneurism not be from the Arterial blood, when it is under the skin and corrupted, although this may be when blood is sent from the Veins into the empty spaces: yet when Blood leaping from the Artery thus opened, returns again, and the skin is instead of an Artery, it may be without concretion, as when it is in the Artery. And because this cannot be in the Veins, an Aneurism cannot be from venal Blood.

A watery, serous Humor, produceth in divers places both general and particular Tumors, because it is contained in divers parts of the body, as in the veins which are dispersed all over, and Bowels into which they are sent, or in o-

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ther Vessels being separated from the blood: from which places, sometimes simple Water, otherwhiles mixed with other Humors comming forth, produceth divers kinds of Tumors; differing exceedingly, as they are in the cavity of the Abdomen, or Belly, Codds, Groyns, or in the superficies of the Body, either in the inferior parts only or all over: as shall be shewed in particulars.

Water seen into the Cavity of the Abdomen is the cause of the dropsie Ascites.

A serous Humor like Water, getting into the Cavity of the Belly, or Abdomen causeth the Dropsie Ascites: and then the belly swells more or less according to the quantity of the Water, and is sometimes so full that it grows very large, in which by tapping we have seen taken from the Living, and found sometimes in the Dead, threescore pound weight and above of water, when much had formerly run out at the Feet; which water doth not only burden with its weight, but by pressing lying and hindering the free Motion of the Diaphragma or Midriff, causeth difficulty of breathing, of which they so complain, and especially when the water goes more to the Midriff and oppresseth it; hence it is that they breath better when they are standing, for then the water goes downwards. And if the same water weaken the Bowels, Liver, Spleen, Veins, Stomach, and Guts, by making them too moist, or by its saltness or sharpness, from mixture with other Humors, or by its Corruption through long continuance, till it stink, make them too dry; the Mesentery Cawle and Reins will be dryed and drawn up, and the Fat clodded as we have seen. Or if this water corrode the exulcerate in any part, or putrifie the same, we have seen the Cawle yellow, and stinking in many, as well as contracted, and the Midriff hath been found the same in and opening of Hydropical People; if this happen, or if any other Bowels be hurt by this Water, it will produce worse Symptoms in the hurt Functions of natural parts, as want of Appetite, Thirst, Cachexy, Atrophy and Diarrhæa and the like, as by Corruption and Gangren of the Stomach, by the water long contained therein, a Vomiting with Heat and vehement Inflammation of the Oesophagus or Wezand, which I saw in an Hydropical Woman, which a little before her Death, vomited often abundance of black, stinking Water, with great Inflammation of the Throat.

The cause of this water in the capacity of the Belly, is from the parts of the lower belly, which contains the Water, or from the Bowels that are ordained for Sanguification, as the Liver, Spleen, Reins, or from the Veins which go through those parts and the rest, or from the Bladder that holds the water; from which, if they be divided or the continuity dissolved by Diapedesis, by which it is strained, or Anastomasis by which the Mouths are open, this water falls: as shall be shewed in particulars.

Fernelius witnesseth, that there is no Dropsie but it is caused by the solution of the continuity, or Division, of the Parenchyma or substance of the Liver. And this by Anatomy we have often known; And that chiefly when the substance of the Liver is cleft and gapeth, from whence the water passing by it from the Vessels of the hollow and gate Vein, and sweating under the Coats, being there constrained, fills them with water, and makes them like bladders by separating the Tunicles from the parts under them, which being broken, the water runs into the Belly: we have often seen these Bladders very large and clear, growing to the Liver and Spleen, in Men dead of the Dropsies, and in an Ape, and Butchers find the same in Cattel. And when these coats are corroded, the water falls directly into the belly. The great Dryness of the substance of the Liver which makes it grow less, is the cause of these clifts in the Liver. And this came rather by a hot then cold Distemper, as appears by the great Thirst of Hydropical People, and the high Colour of their Urin, and other signs of heat rather then cold: and in regard they have it that time most deliciously with spiced meats, and drink the strongest wine, and so continue, being young, or aged, at which time they fall into a Dropsie, by reason of the Dryness of their bowels, and they jestingly complain that they are troubled with water, though they never drank it in their lives. And this we have observed to have been the chief cause of dropsies in our Country, and we perceive that a perpetual thirst in Drunkards, which they long have had from the hot Distemper of their bowels, which makes them ever drinking, is a most sure fore-runner of a Dropsie, if another Disease doth not prevent it by Death.

This also may come by heating of the Bowels immoderately with hot Medicines with which Women labour to warm the Stomach and Womb: or when they have other cold Diseases.

These bowels may also be dryed and cleft by hot, sharpe and constant Diseases, as Feavers, and Jaundies, and therefore the Dropsie which sheweth rather the signs of heat then cold, followeth these Diseases.

From a hard Tumor of these Bowels either all over them or in any part in the concave or convex part of the Liver, or in the Spleen, may these Clefts come, from a Scirrhus of the Liver or Spleen, or any other Tumor which will turn to an Impostume; Or there may be such openings by which the water may fall into the Abdomen, because from this Hardness the Tunicle quickly cleaveth; and if it imposthume and ulcerate, then there is way made for the water: as shall be said in Ulcers. Which is the cause why that Hardness, or Scirrhus or hard Tumor that turns to an Impostume in the Liver or Spleen bringeth a Dropsie, because if there be Hardness without fissures or clifts, that would rather cause the Jaundies, Cachexy, or Atrophy by stoppage, then a Dropsie, which follows the hurting or clefts of the Bowels, which comes from those stoppages; and hence it is that other obstructions of the bowels, when they do not divide the substance of them externally are not alone, the cause of the Dropsie Ascites, as they are of the Diseases mentioned, and sometimes of the Anasarca Dropsie: as we said.

The cause of this Hardness or Scirrhus, is the Dryness of the bowels which cleaveth them, if it be so active that it dry them hard, and this depends upon hot meats, drinks, Medicines and Diseases. Or that which is the cause of these Tumors, as of a Scirrhus, or that hard tumor which impostumates it, outwardly in the fleshy parts of the body, may also be the cause of these in the Bowels. As the too thick juyce with which the bowels are nourished, which comes from the Chylus and Blood from whence it is made or from the mixture of some other juyce, which belongs to another part; and that which turns into an Impostume hath Diversity of matter in it, as hath been often found. Nor can the substance of the Bowels, but the Vessels onely be so hardned from choller and flegm: as we shewed in Obstructions. But an Inflammation of these parts, if it cause a Scirrhus, doth harden them rather by thickning the Juyce that nourisheth them, then any other wayes: as we shewed in an external Scirrhus.

When the substance of these bowels is hurt about the superficies, the water may be sent into the belly; as in an Hydropick Maid, we saw the Liver on the one side with a fungous Tumor growing thereunto, in which there was somewhat congealed, from which a serous Humor might distil. Especially if the Liver and Spleen be ulcerated, so that the Ulcer pierce to the Superficies, the water which sweateth out, as in other Ulcers which are alwaies moist, may cause a Dropsie. Which Ulcers coming after Inflammations suppurated, or Tumors aforesaid ending in Impostumes, and sending forth Matter, do cause a Dropsie at length. Other Hurts do follow such as come from external Injuries by contusion; And we knew two men thrown from a Horse upon their right side, having first some Symptomes of a hurt Liver, who died of Dropsies. The same may be come by an external Wound reaching to the bowels, except Death prevent it, by leaving an Ulcer. Also corruption of the bowels totally or in part, as we have often seen, is the cause of a Dropsie, which follows Tumors

or

or corrosions, or ulcerations, or other hurts of the bowels, from the causes aforesaid. Also if the Tunicle of these bowels be corroded by water putrifying in the belly, or the substance of them hurt, there will be an increase of water in the belly from the Serum, or Whey, which comes from thence. We have also observed that when the Tunicles of the Liver and Spleen, and the Peritonæum or fliute of the belly, where they lye have been corroded by this water, they have so grown together, that we could neither separate Liver nor Spleen from the Diaphragma to which they grew, with tearing of the Tunicles, from whence the Serum or water might flow into the cavity.

In the Body of the Reins which consists of a bloody substance like the rest, if continuity be dissolved as is said, the same may be, and the Dropsie Ascites may come from thence, and we affirme this by Reason and Experience. For seeing Whey or Serum is carried to them continually not only with the Blood by the emulgent Vessels, but is also continually by them there laid up, if the substance of the Reins be open or divided, the water which drayneth from them as from other parts, and making Bladders, or presently piercing, may sooner flow and in more plenty from thence, then from other Bowels into the belly, and may make a Dropsie Ascites which may last long, because the hurt of the Kidneys especially if but of one doth not presently kill a man, but cause a long Disease, and when one is gone, as we said, the other may serve a long time. In which case, besides other Accidents which come from the collection of water in the Belly, we find somtimes some matter if there be an Ulcer, and they piss less, especially if both Kidneys be hurt, because much of the Urine is carried continually into the belly, and comes not to the bladder as it ought. The Causes of these hurts in the Kidneys may be the same with those of the other Bowels, as over Dryness of the same, as may be, which also may cause the stone, as we shewed, and this may be not only by age, hot Diseases, but by hot Urins through the use of hot Meates, and especially Wines.

Moreover Ulcers in the Reins internal and external being more or fewer, may cause the Dropsie which springs from the defect in the Reins: as also the corruption of the Kidneys when they are so consumed that they hang as we have seen like a Purse. Also other hurts internally and externally caused: as contusions and wounds.

Moreover we are more bold to affirme this, not onely from what hath been said, but because we have often seen it; for when a certain Noble Man that had the Dropsie ascites seven moneths, was opened after Death, and we had searched all the Bowels of the lower belly very deligently, and had found no other fault, but that the water long contained in the Belly, had by stinking brought to the Peritonæum, Midriff, and Cawle; we found that both Kidneys were deeply fistulated, with many Ulcers, so large that we could turn a finger therein, with Bladders full of water upon them, which fell down when they brake, and the external coat of the Kidneys was eaten every where through. We gathered that this came from great drinking, because from his Youth he used it, and was very stout at it, and seldom made water. To which did much conduce, his use of spiced and hot Meates continually, which do dry and burn the Kidneys as other Bowels, especially since they were corroded by Retention of Urine.

From the branches of the Veins of the inferior Belly, especially from the *Vena Porta*, which come from the Guts and the Stomach by the Membranes of the Mesentery and Cawle, and gathered into two stocks, and fastned by the right to the Liver, and the left to the Spleen, by a Diapedesis, when the Coats are made thin, or by Anastomasis, when the Mouths are open, especially of the Veins which are dispersed from the great stocks into the Omentum or Mesentery and there ending, being laid open: if water flow plentifully and more then serves from the Natural moistning of the parts least they wither, and be gathered in the belly; The Dropsie Ascites may also be produced. And that this may be, and that the water may flow from the Veins mentioned by the blind Pores and Mouths without solution of continuity, and that without mixture of Blood, or Tincture thereof, appear thus, because as into other parts it breaks forth suddenly and in great plenty, both internally by divers Defluctions, as also externally by Sweats, Tears, Snot and by the Womb fluxes; so also in the Meseraiks, there may not only be some Natural breathing of Moisture into the Belly, as we may perceive a constant Moisture, but it may preternaturally fill the Belly, and the easier, because in those Veins the Whey which is made of Meat and drink, and continually brought with the Chylus, doth more abound then in other parts. And as in ordinary Fluxes called Diærrhæa; or in such as are caused by purging: This water or whey, returns back without Blood by the Mouths of those Veins by which it entered, even so by the internal Mouths by which the branches are closed about the ends, being laid open it may flow into the Belly without any Tincture of Blood.

By the same reason doth the Serum or Whey seperated by the Kidneys from the Blood flow into the Bladder, from all which we gather that the Dropsie Ascites may come though others think it impossible. Also in opening of men that died of Dropsies, when we have seen no manifest solution of Continuity, but abundance of water in the belly and Veins, conjecturing that it came that way into the Belly, we were bolder to affirme it, because in a Hydrocelæ or watery Rupture, the water may from the same Cause flow into the belly, and thence into the Cod, as we shewed.

The Cause of this Anastomosis and Diapedesis or opening of the Vessels in the Meseraick Veins, is too much Serum or Whey therein, which opens them by stretching; or tenuity or thin waterishness which easily pierceth, For then, it being in the Meseraick Vessels, except it go back by the same waies by which it entred into the Guts, and so be purged forth by stool, it breakes through these Vessels and falls into the Abdomen or Belly. This abundance of water is the cause, when its passage from the Meseraicks by the Liver into the hollow Vein is hindered. This happens especially when the attractive Faculty of the Liver is weakned, so that it cannot attract the Serum, and send it to the hollow Vein, which is mixed with the Chylus, and is also a Portion of the blood, and somtimes seperated from it, for Reasons mentioned in the Cachexy, which comes from the weaknes of the Liver. They have also conceived that the passage may also be hindered by the Obstruction of the Liver with a Humor, or Hardness or Scirrhus; which if so great as that it stop the Serum from coming to it, the blood shall be hindered also, and then there would be an Atrophy sooner then a Dropsie; but without that, the same may happen, if the Serum which is in the hollow Vein, and cannot get its Natural Passage by Urine, is so much in quantity, that it being not able to subsist there, it is sent by Nature by its branches into the Liver, and the branches of the Gate-vein: Or flie otherwise back and so be gathered together.

The cause of this may be the weakness of the attractive Faculty of the Kidneys: Or an Obstruction so great, especially in both Ureters, that the Serum cannot get into the Bladder. The cause of which we have declared in other Symptomes of Pissing.

It hath been thought that the same may come from stoppage of wonted Swear, but this cannot alone be the cause, or without another, because at that time the serum may be evacuated by Urine. Also the superfluous Generation of Serum: the cause whereof we shall shew in the Causes of Leucophlegmacy, if it be joyned with the rest, will sooner produce a Dropsie, and being then a greater quantity of water, it will sooner pass the waies shewed into the Abdomen. And as this comes from Moisture taken in, so the Dropsie Ascites comes by continual Drinking, not onely through the hurt of the Bowels caused by much Drink, but because there is plenty of water thereby, in those usually who piss not according to the proportion of the Drink received

ceived, but the Serum abounds in the Veins, by which they are heavy, and they complain of Heavyneſs and Extenſion of the,belly before they have a Dropſie.

It may be declared by probable Arguments, and certain Demonſtrations, that the water falling into the Belly may Cauſe a Dropſie, by the dividing of the Meſeraick Veins which contain the Omentum and Meſentery. For ſomtimes by an external chance, when any Vein is by violence broken, many have had a Dropſie. For firſt Blood and Water have flowed from thence into the Belly, and when the Wound hath been turned into an Ulcer, or to corruption of the Bowels, which have been found after Death; a Dropſie hath followed by the continual Diſtillation of water from thence; and commonly bloody ſtools and vomits have gone before, afterwards mattery and filthy. Which Ulceration or Corruption, by which the Serum falls down, may come by a Corroſion in the Omentum or Meſentery,where the Veins are: when ſharpe and malignant Humors, retained in theſe Veins, which uſe to be full of Excrements, eates them through, and ſo may cauſe a Dropſie: As alſo if this corruption in the Membranes and Veſſels, come from the long retenſion of ſtinking water, as we ſhewed, we perceive in all Diſſections of Dropſies,that the Omentum and Meſentery are by this means infected; which being ſo, though it be not the chief cauſe of the gathering of the water, ſeeing it came from other parts: yet becauſe it then diſtilleth from thence, it cauſeth the water to increaſe, and the more when other Bowels are ſo infected with this water, that they are alſo broken.

It is credible that water may fall into the Belly and cauſe a Dropſie, from other veins that preſs inward, as the *Vena cava* or hollow Vein, and its branches diſperſed to the Reins, the Womb, and other parts, as Muſcles, and Membranes, by Anaſtomoſis or Diapedeſis, which are when they are opened; and eſpecially in a Cachexy or the like, wherein there is much water, and more eſpecially in women, who uſed to have Evacuation of this water, by their courſes or after them by the whites, which being ſtopped cauſeth the water to find out another way out of the veins. In theſe Veins it cannot ſo eaſily come by ſolution of continuity, becauſe if it be in the greater Veins, there will be a bloody Flux which will prevent a Dropſie by Death, and the leſſer veins lying deep, are not ſo ſubject to Injuries as thoſe called Meſeraicks,which are in the Omentum.

We have found in the Anatomy of Hydropical Perſons much water in the Navel-vein, where it is joyned to the liver and Peritonæum being dilated, which in People of age reſembles rather a Ligament,then an hollow Veſſel.

Somtimes we have found it not only there retained, but carried to the Navel by the veſſel that endeth there,and gathered under the skin, and to produce a tumor like a bladder of water, and from thence to flow into the Belly, and to break out of the Body ſo plentifully that the whol belly was emptied.

We ſaw one that had his Belly ſwollen before he died, from the breaking of his Bladder,and his urin diſperſed into his belly; in regard another had leaped npon his belly, when he lay upon the ground drunk,which brake his bladder being ſtretched out with Drink. And it is probable that the ſame may happen from the breaking, or otherwiſe opening of the Ureters when the water flows out, and that a Dropſie may come from thence, becauſe they may live long after. This I have obſerved in a Child, which new born, lying in his Cradle,after a long ſuppreſſion of Urine, voided a little ſtone and much Urine therewith,and growing older, died miſerably of a Dropſie with ſhortneſs of breathing, having firſt had great pain in his right Groyne, when his Urine was ſtopped for a time, till his Ureters broke which cauſed the Dropſie.

Water fallen into the Codds is the cauſe of Hydrocele, or water Rupture.

If water fall into the cavity of the Cod it will either cauſe that Tumor which is in the Dropſie Aſcites with Swelling of the Belly, or the Hydrocele, which is without a Dropſie. And this tumor being wateriſh comes from no other part, then the belly in both caſes, into which it firſt fell, and from thence fell into the Codds. And that two waies, the one by Aanaſtomoſis or Diapedeſis, which is when the water goes under the ſkin from the belly into the Codds: as in the Dropſie Aſcites, where it falls the ſame way,into the Feet alſo. The other way is by the Peritonæum, which brings the ſeminary Veſſels to the Codds, if it be ſo enlarged that the water gathered in the Belly, may fall by it into the Codds, for albeit the relaxation be not ſo large, as that is by which the Guts fall into the codds, yet if it be ſmall, the water may diſtil by drops. And this relaxation may come from the water only which moiſtneth that part of the Belly, where theſe paſſages are, without other force, but if ſuch be, there is a greater Dilatation and Rupture, the way being enlarged; and the Codds are ſooner filled: as we ſhewed in the Dropſie-rupture. But if Moiſtneſs be the cauſe, only it will come with much water, as in the Dropſie: but in the watery Rupture, it will come ſlower, becauſe there is but little water, and falls by degrees into the belly, and ſo into the codds.

And we have ſhewed that not only ſolution of continuity in the Bowels and Veſſels,but alſo Anaſtomoſis and Diapedeſis of the Meſeraick Veins, may be the cauſe of gathering water into the belly in a Dropſie. And this ſeems to proove that in a Hydrocele, the water doth ſweat through or drop from the Mouths of the Veſſels, becauſe that in this caſe, they have no other Diſeaſe but Swelling of the Codds, and it is long a growing, and the water is by Degrees carried through the Tunicles of the Veins or Mouths thereof. And we have ſhewed that this may come from the ſame Cauſes, from which the Dropſie ſometimes proceeds, but leſs, and ſuch as bring leſs Damage, in regard the water Naturally ſweating forth, and bedewing the inward parts of the Belly, although it abound not much; yet may it without a preternatural Cauſe be gathered into the Codds, the wayes being laid open by Moiſture, or the like cauſes, and ſo the relaxation of the Paſſages may be the only cauſe of Hydrocele, or Water-rupture.

When the water gets into the Groins, it cauſeth thoſe watry Tumors in Women.

When a ſerous Humor falls into the Groynes of women, it makes a Tumor like the water Rupture. And that by reaſon of the looſneſs of a Paſſage by which a certain Veſſel comming from the womb is carried without the Peritonæum into the Privities,not unlike that of men which ſerve the ſeminary Veſſels. Which relaxation may come from the ſame cauſes with Hydrocele,by reaſon of its moiſtning the parts, and becauſe it was firſt in the Belly. Among which Cauſes ſtrong throws in Child-beaing, or Ruptures in this part, may occaſion the Dilatation,and the Tumor following thereupon.

In the Dropſie Aſcites there is a Collection of water in the Cavity of the breaſt.

Somtimes in Dropſies the Humor which is gathered in the Belly, is carryed to the cavity of the Breaſt, which is perceived after Death upon Diſſection, though before it appeared by no tumor, except as we ſaid in an Empyema or matter in the ſide,there be ſo much of it gathered together, that it cauſe a Swelling in the ſpaces between the Ribbs. Beſides, we may gather from ſhortneſs and difficulty of Breathing, which then troubles Hydropical Perſons more, though they ſtand upon their Feet,that there is water in the Breaſt; becauſe as when it is in the Belly, by waſhing the Midriff below,ſo when in the breaſt by oppreſſing it above, it cauſeth weight,and hindering its motion two waies,cauſeth difficulty of breathing, and the rather becauſe it ſomwhat hinders the motion of the Lungs. But how it is carried from the belly to the breaſt, we cannot find another way then by the Midriff, becauſe that ſeparates the parts, and by which as by the Peritonæum or inward Rimme, and the Muſcles thereto adhæring, we have ſhewed, that it may ſweat into the Belly, or be carried by the Mouths of the Veſſels, ſo alſo may it here paſs through the Midriff;

except some corrosion, as we shall shew may be by water long retained, or other perforation, do make it way. For which Reason, if water comming not from the belly in a Dropsie, but another part into the breast, as in other Diseases, passing through the Midriff fall into the lower belly: it may cause a Tumor there, or if it go farther, a Tumor in the Feet. And this we suppose to be the cause why short breathed or Asthmatical People are Hydropical, except the Causes of both Diseases do meet: and at length though not presently, the Feet in the Diseases of the Breast will swell, except the water find another way under the Skin from the Breast downwards.

A Flux of water by the womb in the Dropsie Ascites.

Water getting into the hollow of the womb, and enlarging it causeth the belly to swell, and this is called the Womb-Dropsie. But we shewed in the Diseases of the womb, that the capacity of it was not so large to hold so much water, nor can it be so dilated except there be a Child growing therein, yet it may happen, that water gathered in the Belly may be voided externally by the womb, either all or it in part which may cause the asswaging of the Tumor, which caused men to think that was gathered in the womb. But when this is so, it is poured forth by the Veins which are in the Neck of the womb, which sendeth forth the Menstrual Blood or Whites, by an Anastomosis when Nature labours to disburden her self by this way which is ordained for the same; so that there is no need to determine that the water was in the bottom of the Womb, which caused the Belly to swell. It may also somtimes happen, that before the Belly is full of water, it may find out a Passage by the Veins of the Neck of the womb, in a Cachexy, or evil Habit, or the Leucophlegmacy, and so prevent a Dropsie: as long since I observed in a Woman of an evil Habit of Body, which is yet alive, which often hath her Terms abundantly, and when they cease, she avoideth abundance of water by the Neck of the womb.

When water is carried downwards in the Dropsie Ascites it causeth a tumor in the Feet with that of the Belly, because the humor being thin still goes downwards, and when it is fixed in the lowest parts, it causeth first an appearance, and when the Flux continueth and filleth the Feet, it tendeth upwards by the Legs and Thighs to the Loins and Belly, and there it being under the skin, is more manifest in which places it doth not onely lift up but softens the skin, so that if you press with your Finger, it will pit and continue so somtime. And when this watery Humor, gathered under the skin moveth, it happens that if the Legs are downwards as commonly, they grow bigger by water comming thither, and the Belly somwhat less, and if by lying down or other waies they are lifted up, the water comming back swells the Belly, and the Legs are less.

This watery Humor in the Dropsie Ascites sweating into the Feet, Leggs, Belly and Loins, from the branches of the hollow Vein, or flowing by Anastomosis, is referred to that kind of Dropsie which comes from plenty of water in the Veins, because the water doth not only flow from the branches of the hollow vein into the belly, but also outwardly as in a Leucophlegmacy, and we shall shew that the Leggs swell by that way. In all other Causes of the Dropsie Ascites which depend upon the Diseases of things contained in the Guts, and of the Meseraick Veins, it seems to be evident that the water is carried to the outward parts, and so to the Feet, from the cavity of the belly, into which it first came, not only in regard that when the water falls downward into the Legs, the tumor of the belly abateth; but because the breathing is freer, and when the water comes back, these return. And this certainly confirmes it, because when the scarse skin either breaks or is opened in the Legs that are swollen, the Tumor of the belly is abated by the water that drops out by degrees; or if it flow violently or long, it quite goes away; and many measures of water flow this way forth, which could not be contained any where but in the belly, because the Feet while they do swel, and when they are abated, send forth much water, which could not come but from the belly. And it is to be prooved, in that when water gets into the belly from the hurt of the Bowels, which we said was the usual Cause of a Dropsie, and when there is no Fountain of water but from thence, the Feet will swell before you shall perceive a Tumor in the belly, this shews that it came from the belly, because it was no where else.

But as these are plain, so how this serous Matter can fall without the cavity of the Peritonæum, (in regard there is no apparent Passage through the Membrane) it is not manifest. Wherefore we gather that this is done by a Diapedesis, and that the Serum or Whey doth sweat through the Membrane under the skin which is distended by Swelling, and moistned with Humors; and falls by degrees (between it, and the parts beneath, unto which it is joyned) downwards, as in other Defluxions. And we conceive that it may return the same way upward, because in other parts it doth so, that is, pierced through the Membranes, and pass through the Veins. Or that it comes by an Anastomosis in the mouths of the Veins dispersed into the skin from the Peritonæum, when the Whey gets in, and flows that way into the parts beneath, and returns again by the same. Or because some part of the Peritonæum is so corroded by a sharp and sinking water, that water may pass through it under the skin. As by Anatomies we have seen, that the Membrane hath not been eaten through in one, but divers places; and somtimes in that place where it encompasseth the Midriff, upon which the Liver and Spleen do lie. And if the Tunicles of those vessels be also eaten through, the parts touching will grow together: as we have shewed formerly.

But in the case of him that had a Dropsie with a Rupture, whose Guts with water had filled the Codds, and were grown to the Peritonæum, as we shewed; this growing together came from the corroding of the water, by which the Tunicle of the Gut and its Membrane were eaten through. And this, as other Glutinations proveth, that parts cannot grow together except their Tunicles or Skins be taken off: as we see in Fistulaes. Moreover; since we have observed in men alive, that this water in the Navel which came from the cavity of the belly, not by the Navel-vein which is rooted in the Liver, and if opened would send water from the Liver, and not from the belly and in less quantity: but by the Peritonæum to the Superficies of the skin; which it raised into a bladder being gathered under the scarse skin, which being cut, all the matter in the whol belly flowed forcibly forth: Hence we conjecture, that nature can find out divers Passages for the water to pass under the skin, through the Peritonæum. Perhaps by Bladders inwardly growing as outwardly, or by solution of continuity some other way: and if after Death there were more Anatomies made of such as dyed of Dropsies, there would be many such things discovered which are yet unknown.

When water gets into the whol body, it is the cause of Leucophlegmacy.

When a watery Humor gets into the Habit of the whole body, it causeth that General Swelling which is in Leucophlegmacy; which comes not only from crude Nourishment, as we shewed, but of a serous Humor, less or equal, or more in quantity; in which not only the substance of the parts is too much increased, but being watered with the Serum it is made softer, takes Impression sooner, and longer retains it. And these appear most in the Feet (because water being thin alwaies goes downward) and they are very like then to the Legs of Hydropical Persons. And this may be called the water between the skin, or *Aqua intercutis*.

Now this serous Humor comes not in this mentioned Leucophlegmacy from the capacity of the Belly, but from the Veins distributed into the Habit of the body, by which it passeth with crude blood to the nourishing of the Parts, and as the blood nourisheth them with crude Juyce, so this watereth them. And the Cause of the mixture of this serous Humor with the crude, is the abundance of it in the

Veins.

Veins. When there are Causes which produce these serous Humors joyned with the weakness of the Bowels that do sanguifie or make blood, so that they cannot sufficiently compleat it, as we shewed in the Leucophlegmacy. Among which this was chief, the immoderate increase thereof, which most say is in the Liver, and is Naturally produced at the second Concoction, so that if the Liver be weakned or cooled, because it cannot make the Chylus into Blood, they say, it turns it into Whey. But these Arguments may proove that Whey and Serum is not made in the Liver, but in the first Concoction, and it takes its form presently from thence, because being partly made in the Stomach with the Chyle, of the best Juyce, some part thereof is thinner as Whey in Milk, and is of the same use with the Chylus, of which it is a part, and comming partly from the Humors abounding through eating and drinking and made thinner, it hath the form of Whey, and being sent into the Guts with other Excrements, it is carried from the Mesenraick Veins into the hollow Vein with the Chylus, and without it, as we see some who pisse out Drink too much taken, presently, being suddenly snatcht to the Liver.

Hence it is that we must attribute the abundance of Serum to too much drinking, and use of moist things, which administer matter unto it, rather then to the fault of the Liver: except we will (as some do) call that crude Juyce which is made by defect in the Liver, a serous Humor, or because the separation of the Whey imperfect at the makeing of the Blood, cannot be handsom, but there is more Whey in the Blood then is needful, and is not separated as in other places, makes it more watery, for this cause we may pronounce that the Serum or Whey is not only made by the Liver, but also gathered into the Veins more plentifully: And so to determine the Leucophlegmacy comes from the weakness of the Liver. And this is chiefly, when there is not a sufficient Evacuation by Urin, the attractive Faculty of the Kidneys being weakned, or when usual sweating is stopped, which may be the only Cause, without the Distemper of the Liver of water in the Veins. And this is sooner when the Diet is such as breeds water; These causes meeting, make a Leucophlegmacy in which the whey or water called Serum, is more then the crude Juyce, or such as comes from only Serum, when the Imbecillity of the Liver is absent. As we have seen some who have swollen only by drinking a great Draught without fetching breath, when they were very hot, by reason of the Heat which carried the Humor suddenly into the Veins, and thence into the Habit of the Body, and the same hath been when a body hot and sweating was exposed to the Air, through the strikeing in of the water. And it sometimes happens that the water being carried from the Meseraick Veins into the Belly (from the Causes aforesaid,) and so into the Habit of the Body, that the Dropsie Ascites is produced with that called *Anasarca*, and so they both are united.

Water in the Feet may cause a swelling without a Dropsie.

Water falling into some parts and there gathered, causeth Swellings, as when it is in the Feet: of which we spake without the Dropsie Ascites, it causeth a Tumor like that of a Dropsie being soft. such as we described formerly. And this is when together with the crude Nourishment which causeth Oedematous Tumors, it falls from the inferior parts into the Feet. Or when in Diseases of the Feet, as the Erysipelas Oedematous or the like, these Excrements are carried with other Humors into the Feet, and cause these Diseases, and when the other are discussed, the Tumor remaineth. Or when by a Desluxion into the Eyes, there is an Epiphora, or Moistness and weeping, which makes the Eye-lidds swel which was spoken of in the Eyes. Or when in the Declination of other acute Diseases, Nature disburdning the remainder of the Excrements with the water into the lower parts, the Feet do swell; and the sooner, because having long kept the bed and their Feet up, when they begin to walk, the Humors flow downward. This tumor of the Feet, in men that are in Health, is counted a good sign because the reliques are so carried away. And because such thin Humors are quickly discussed, it continueth not long, unless it be such as shewed it self at first in the Feet, which a Dropsie followed, this deceiveth many, and it may be discovered by other accidents which accompany a Dropsie.

Water in the Leggs, the cause of particular tumors there.

We have formerly shewed that there hath been a Tumor in the skin, upon the Longitude thereof only from a serous humor, and because it came suddenly it was a sign that it would go suddenly away, though it pitted with strong Impression.

And this was sent by Nature, by reason of the plenty of it, as appeared by the Parties continual Sweating, and by reason of the thinness, and sharpness, which caused Itching. And there was also a Loosness of the Feet and a contraction.

Water gathered under the skin of the Head, the cause of Hydrocele

If water be sent under the skin into any outward part, if it separate the skin from the part, and fill the space between it, causeth a Tumor, as under thick skins of the Head in the Tumor called *Hydrocelephale*, comming from plenty of water there breeding, and gathered together.

Water in the Navel is the cause of Hydrophalon.

And when water is under the skin of the Navel, the Tumor called *Hydromphalon* is raised being carried thither by the Navel-vein enlarged, or by reason of the plenty thereof, or from other causes, while the Passage is not dryed: as we shewed in a Dropsie may be.

Water in the Eye-brows, Cause of their Swelling.

When water is in the Eye-brows there is a swelling, and the sooner with tears and rubbing, because they will often Itch. Somtimes there is a sudden Desluxion of Blood into the Eye with water, with Swelling and Redness, as if there had been a stroak (comming and going) about the ball of the Eye. These have I seen, in two Children of evil Habit of Body, having pain in the Limbs, and the running Gout.

Water under the skin of the Eye, the Cause of Phlyctæna.

Also when water is under the scarfe Skin, if it be separated from the parts beneath, and the Mouths of the Veins that end there, and stop them, causeth the Bladder called *Phlyctæna*. And this will be so in other parts. The cause is the abundance of whey brought thither, and hindered from passing through the Pores by Sweat, and therefore it getteth under the skin and lifteth it up. And if this be salt or sharpe, provoking Nature, and in divers parts. It causeth those watery Pustles in the Itch, called *Hydroæ*. Also another external force may cause the same, when the scarfe skin is raised; as also by rubbing or burning, as we shewed.

Wind begets some of the Tumors aforesaid, differing according to their parts, as in the Belly, Codds, Stomack, and Guts or the like.

Wind comming from other parts into the hollow of the Belly, or bred there, is the cause of the simple Tympany, or if with water, of the Ascites.

Wind gathered and kept in the cavity of the Belly, is the chief Cause of the Dropsie called Tympany; and it is seldom without water: And it must be in the cavity of the belly and stretch it forth very large, and we may know there is wind by the sound thereof when it is beaten. And somtimes there is a pricking pain by reason of the Distension of the Membranes. These winds getting into the belly, because no parts beneath in which it may be retained, so plentifully must needs come from the Stomach and the Guts. But the doubt is which way, for it seems impossible that they should come through the blind Passages of the Stomach and Guts, because they are easily held in with the smallest Membrane, and a thin Humor will with more ease sweat out then wind break forth. And it is plain that they

they come not from solution of Continuity in the bowels, because then the Chyle of other Excrements would also come forth. Therefore it is probable, that if wind be carried from the Stomach and Guts into the Belly, it first gets into the little mouths of the Meseraick Veins, and from them, as we shewed the water doth, into the cavity of the Belly. And this appears, in that the water may come the same way, which is commonly mixed with the wind, except, as some say, the wind passing by the inward Tunicle of the Guts into the outward and piercing through the mesentery, where it is joyned unto them get in, and being contained between two Tunicles, at length gets through them into the Belly; and whether it come this way or that, it is rare, as also the Tympany, and not but from abundance of wind, by which the Guts are so distended, that they are so thin, that wind may pass through. And this cannot be except it be so inclosed in the Guts, that it can find no other way upward or downward.

This abundance of wind is continually made in the Guts and Stomach, from great weakness therein, turning that by its weak Heat into wind, which should have been concocted; from whence also may come the Dropsie called the Tympany, from wind and water, if the Liver be weakned also, and water be mixed. Now the great Obstruction and gathering together of the Guts, causeth that it cannot go forth downwards, by its Natural Passage, and therefore the pain of the Colick comes first with the binding of the Belly: as we shewed in those Diseases, and from what Causes they came. And if they continue, and the wind be carried into the Belly as we said, the Belly will begin to swell, and the pain of the Cholick remains as at first, with the binding or costiveness of the Body, till by continual dilatation or Enlargement, a way is made, that the wind which was in the Guts, may have a free Passage, and cause no more pain, and if this wind break away, yet that which is without the Guts doth not, but the belly is swollen, and the pain of the Cholick is turned to a Tympany. If dropsie Bodies were often anatomized, it would be found out, that wind in a Tympany doth sometimes get into the space or vacuity of the Belly, by reason of some manifest Solution of continuity in the Stomach or Guts, which were before stretched exceedingly thereby, or by some other waies; and this may hence be collected, because it is the worst of all Dropsies, therefore the hurt ought to be great, and if it were so in an Ascites, it would be incurable, And if the Solution of continuity be so great, that the Chyle and the Excrements also get into the belly, it will sooner kill; but if only water and wind, without thick Matter (as it may be) the life will be prolonged.

Besides this Cause of the Tympany which comes from the wind of the Guts, getting into the belly: there is another, which comes from wind bred in the cavity of the belly. And this is when the watery Humor with which the belly is alwaies moistned, sweateth too plentifully from the Meseraick Veins, or comes too fast from the Mouths of them, and turns into wind, which retained for want of passage, causeth a Tympany. And if the whol Humor turn into wind, which is seldom, it will be a simple Tympany, but if mixed with water a Compound, which is most usual. In which kinds, if water abound not over much, and falls not into the Feet or other parts from the cavity of the Belly, nor causeth Swelling any where else, neither can it be discovered in the belly. But if there be so much by the continual Increase thereof, that the Tumor of the Belly not only extends it, but causeth a Noise of Water falling into one side, when the Patient turns, and the water falls into the Feet, there is an Ascites with the Tympany. Now the Cause of this wind turning into water, (in regard we have shewed in Ascites the cause that brings it into the belly) may be the Heat of the inward Bowels, which maketh the water turn into a Vapor or thick Wind: as it may do in in any part of the body, where there is space and Humidity.

As we have shewed, that in the Ascites, when water is carried from the cavity of the belly into the Codds, it makes the Tumor called Hydrocele or Water-rupture: so when wind comes from the same part into the Codd, and puffeth it up, it causeth the Pneumatocele or windy Rupture, Which we never saw in a Tympany, and it is seldom alone, and when it is, there is commoly water with it. But by wind brought thither, that Swelling in the Codds which comes with the pains of the Cholick and vanisheth presently, may be produced, Nevertheless, the cause of both is the dilating of the Passages of the Peritonæum, and it is less when wind only with a little Moisture, gets by degrees into the Codds. This Dilatation or stretching in Pneumatocele or Wind-rupture, may come from divers Causes mentioned in *Hernia*, especially in young, tender Bodies, which are subject to these as well as other ruptures by crying; and the easier if there be wind in the belly, as it useth to be, without a Dropsie, in those that are sound, otherwise being made of water turned into wind, as in all vacuities of the body it may be, and we shewed a Tympany cometh the same way; and though the wind be not much, and disperseth it self, yet if there be a Passage to the Scrotum open, it will get thither; For which reason, this puffed Swelling in the Codd which staies long, comes from the straining, which dilates the Passage by wind that breaks through, by which Passage after the force is over, the wind comes back into the belly and the Codd ceaseth to swell, neither doth it return without a new force be raised.

Wind kept in the Guts and stomach is the cause of the Tympany of the Guts.

Winds detained in the Guts and belly which are not gotten into the cavity, do not only produce the Cholick, but if they be so inclosed, that for want of Passage they swell the belly, they may produce a kind of Tympany, more easily then when the wind breaks into the belly, as we have found in those whom we took to have the Tympany, and had no wind in the cavity of the belly, after they were dead, nor did the belly aswage. But the Guts, especially the thin, were so stretched with wind, that when they were forth, we could not get them in again, and we wondered how they could be contained in the belly, before it was opened. And in one, we found them made so thin by stretching, that they were not only shining and clear like a blown bladder, but when they were broken, they sent the Excrements violently forth with the wind. And the Cause of this Tympany, is the same with the other, that is wind and gathering of the guts or great Obstruction: as we shewed, and hence it is that in this kind of Tympany, they neither break wind, nor go to stool for a long time.

Wind contained in the stomach, is the cause of the swelling of the stomach, wind in the Guts, is cause of the Cholick and Tumor thereof.

When wind is gathered in the Stomach, it makes it swell visibly, and this is the Inflation of the stomach mentioned, whose cause we shewed in the Diseases in the Stomach; and when wind lying in the turning of the Guts, causeth little Tumors in those parts: we have shewed the Cause thereof in the Cholick.

Wind under all the Skin, is the cause of a general Tumor.

When wind gets into other parts and spaces of the body, either alone or with water, it causeth Tumors. As when it is every where under the skin, it causeth the general Swelling of the body, which comes suddenly and lifts the skin from the body; as they who make a hole through the skin, and blow therein that they may the more easily take the Feathers off from the Quils. And though this Swelling comes seldom, and it is difficult to be, yet sometimes Nature, either by the abundance of wind dispersed in the body, especially if there be water joyned therewith, being offended, violently throws it to the extream parts under the skin. And this may be when Nature stirred up by Poyson taken in or by the sting of a venemous beast, or by poysonous Humors labours to expel the same.

Also

Alſo this general Tumor of the whol body with difficulty of breathing, comming from the ſtretching of the Muſcles between the Ribbs or the like, may be as I have ſhewed, by the ſuppreſſion of Sweat, which comes by violent exerciſe, through the Coldneſs and Moiſtneſs of the Air: and this after purging, is eaſier cured with ſweating.

Wind creeping under certain places of the skin, is the cauſe of the Tumors called Phyſodes, and windy Oedema.

Alſo in certain parts there are peculiar Tumors from wind under the skin, and if they be ſimple they are called *Phyſodes*, and windy bliſters: but if the wind be joyned with a crude and ſerous Humor, they are called *Oedemata* or windy Tumors: which as they may come of their own accord from an internal Cauſe in divers parts of the body, ſo may they come from without, as when the Hair is pull'd hard, we find the skin blown up with wind which got in upon the Pulling of it up; and we ſee the Hands and Feet ſwell with cold which bindeth the skin, lifts it up, and ſtraineth out the thin Moiſture.

Wind under the ſcarſe skin is the cauſe of Phlyctænæ or wind Bliſters, wind between the Muſcles, is the cauſe of the Cramp.

If wind be under the ſcarſe skin, and bliſter it, the Bliſters called *Phlyctænæ*, do come from thence, ſuch as are mixed with wind and water.

If wind be between the Muſcles, it cauſeth Tumor and Cramp of which we ſpake.

If it get under any external Membranes, or the Perioſtium which is the skin upon the bone, and cauſe a Tumor, becauſe it is with pain, we ſpake of it in the Cauſes of windy pains, when it gets into other internal cavities, as of the Breaſt, Head, Womb, becauſe it produceth other accidents beſides manifeſt Tumors, of which we only here ſpake, we refer you to them.

Wind under the Skin and Membranes of the Neck, the cauſe of Broncocele.

That wind getting under the skin and and Membranes under it in the fore part of the Neck, cauſeth the Tumor called *Broncocele*, appears in that the skin in that part of the Neck, ſeems extended and lifted up, and when it is beaten it ſounds as if the air only were underneath. The Cauſe of which Air there gathered is nothing but looſneſs of the skin plucked up, (when the Membrane which is above the Neck, is more red and thick from the rough Artery, and the Muſcles of the Neck before which lie under it) making a ſpace underneath, into which the Air or Wind got under to avoid vacuity, not only filling it, and making the skin and membrane ſwell, but in by ſtretching, cauſing it to increaſe. Hence it is that we do not only make the wind to be the Cauſe of this Tumor, but the ſeparation of parts which were joyned by ſmall Fibres, which being torn a ſunder or broken, cauſe this Diſeaſe to be called a Rupture, or breaking of the Throat or about it. Albeit ſome think this Tumor comes from Rheum falling from the Head, but this cannot be, becauſe of the not pitting thereof with the Impreſſion of the finger, nor from water: and if theſe two Humors ſhould produce this Diſeaſe, and they ſhould be contained there long, they would produce other putrid Infirmities, which they perceive not. And that ſhortneſs of breath and Hoarſneſs comes not from any humor, but from a ſtretching by which the free motion of the Throat is hindered. Nor do we deny that Deſtuctions may be carried thither in this Diſeaſe, as well as into other ſpaces, and that other excrements may be there collected; but that theſe will not cauſe this Tumor, in regard when they are diſcuſſed, the Tumor remaineth. But the chief cauſe of this ſeparation of the Membranes, is violent ſtraining in Child-birth, when the breath is held in the time of Delivery, or when they blow ſtrongly with the Mouth, and this appears by the Swelling of the jugular Veins of the Neck, from which the Membranes are divided, and when the Spirits are driven into the Neck by the Veins and Arteries, the wind carried thither, alſo may cauſe this Diviſion and Separation of the Membranes.

Any part falling from its Seat, outwards cauſeth the Hernious or Rupture, Tumors called *Cele*, and this is either a Gut or the Cawle, which cauſe this when they fall from the cavity of the Peritonæum, under the skin or into the Codd. The Cauſe of the falling out whereof, ſhall be mentioned with thoſe of the Womb and Anus.

The Cure.

We ſhall firſt diſtinguiſh the Cure of divers ſorts of ſwellings in reſpect of the cauſes, nemely, as they come from Flegm, which we call crude Juyce, or water or wind; or from the nouriſhing Juyce, either mixed with ſome or more of them; or as they come from Milk, Blood or Seed. As for the Tumors that come from ſome part fallen called *Celæ*, becauſe they come from another place: we ſhall ſpeak of them in things caſt off, and in things caſt forth.

The Cure of Tumors that comes from crude Juyce, is firſt in regard of the Swelling of the whol Body, and Leucophlegmacy from thence: and then in regard of particular Parts, as Oedema.

The Cure of Leucophlegmacy, or white Swelling of the whol Body.

If Leucophlegmacy be ſimple, although the whol Body be ſwollen, and in Aſcites the Belly and the Feet are only ſwollen, yet is it eaſier cured then the Aſcites, becauſe the hurt of the bowels is leſs, and the weakneſs which gets this crude blood may be amended: with more difficulty, if it tend to an Aſcites, and not at all, if it be joyned with it. In old men it is hardly cured, although it be long lingered.

You muſt begin the Cure as in a Cachexy, becauſe it is the Original of it, and they depend upon the ſame cauſe long continuing: you muſt correct the Diſtemper and Weakneſs of the Liver and Spleen, by removing firſt the cauſe, if it come from too great a Flux of the Terms, Pills, or other bleeding, then you muſt ſtrengthen them, if there be Obſtruction you muſt open it with moderate Aperitives and Cleanſers, leaſt they provoke the Flux if there be any, and with ſtronger Apertives if there be no Flux, which may alſo move the Terms if they be ſtopped, all both by inward and outward means. Alwaies evacuate the crude watery Humors which are in the Stomach, Guts, and Veins, or the Habit of the body, by Purges, Sweats and Urin.

Alſo by Topical external Medicines to the parts moſt ſwelling, which may take away the Matter by diſcuſſing and conſuming it. But in a Leucophlegmacy, where there is alſo much Whey, or that which is with an Aſcites, there muſt be the ſame Cure with Aſcites, by drawing out and and conſuming the water, with Remedies according to the cauſe. The Remedies uſed for Anaſarca, or a Dropſie ſo called are as followeth.

You muſt purge the Stomach from crudities, and open Obſtructions with cleanſers, ſuch as were preſcribed in a cachexy, with things that purge water, if it be ſerous or watery.

As, Take *of the four or five opening Roots each one ounce, of Orris and Elicampane, each half an ounce, of Aſarum two drams, of the Barks of Cappar roots, Aſh, and Tamariſk barks each ſix drams, of Liquoriſh one ounce and an half, Succory with the Roots, of Endive, Groundpine, Maiden-hair, Maudlin, Fumitory, Hops, each one handful, of Wormwood, and Thyme each half an handful, of Elder flowers, Broom, and Tamariſk flowers each one pugil, of Raiſons ſtoned ten pair, of Aniſe, and Fennel ſeed, each one dram and an half, of Endive, and Dodder ſeed each one dram, of the four cold great Seeds two drams, of Polypody, one ounce and an half, of Senna two ounces, of Epithymum, half an ounce*, make a Decoction, and in the ſtraining infuſe *three drams of the Troches of Agarick, of Rhubarb half an ounce*, ſtrain it and add *two ounces of Syrup of Roſes ſolutive, or of juyce of Roſes, one ounce, of Sugar* as much as wil make an Apozeme *for five or ſix doſes, make it ſweet with Cinnamon, Spike, Schœnanth, and Sanders*, and if you muſt uſe more, encreaſe *the quantity of Sugar, and make a Syrup half or fully boiled.*

To this in a watery Leucophlegmacy, you may add *Seldanella, or pot Mercury, or Carthamus seed, &c.*

A Wine: Take *of Succory roots one ounce and an half, of Fennel and Orris roots, each one ounce, of Elicampane half an ounce, of Asarum two drams, of Tamarisk bark one ounce, of Wormwood, Groundpine, Agrimony, Thyme, and Epithimum, each two drams, of the Topps of the lesser Centaury, Cordial flowers, Smallage seed, or Parsley, and Fennel seed, each one dram, of Senna one ounce and an half:* to these you may add *Soldanella one dram, Agarick in Troches, and Rhubarb, each three drams, of Spikenard one scruple:* infuse them in as much Wine as is sufficient, for five doses.

An ordinary Drink. Take *of Rhubarb four scruples, of Troches of Agarick, one dram, of Spikenard six grains:* steep them in white Wine, and after pour *Wormwood, or Centaury,* water thereon, and strain them adding *Syrup of Roses solutive, or some Physical Decoction, of pot Mercury and Soldanella,* if there be more water: make a Potion.

These Pills Electuaries and Lozenges which we mentioned in a Cachexy, are good here, adding things that purge Water.

Glysters which cleanse and expel wind, are here useful As, Take *of the Emollient Herbs, three handfuls, Mercury or Beets, Penny-royal, Calaminths, each one handful, of Chamomil, Elder, and the lesser Centaury flowers, each one pugil, of Orris, Elicampane, and Asarum roots, each one ounce, of Fennel, Caraway and Cummin seed each two drams:* make *a Decoction in water with Barley, or Peason, and dissolve benedicta Laxativa, or Hiera, half an ounce, of Oyl of Rue, and Dill, each one ounce and an half with a little Salt,* make *a Glyster.*

You may ad the Decoction, *of Wormwood, Marjoram, Chamepyts, or Groundpine, Rosemary flowers, Stœchas, Lavender, and Broom flowers, also Agarick, with Brine, Urine, or Lee, and other Laxatives and Oyls.*

An abstergent Glyster not so strong: Take *of the Urine of a Boy one pint,* to which add *Lye, Oyl of Chamomil, or Lilly two ounces,* make *a Glyster.*

Vomiting is good to cleanse the Stomach, where the beginning of Crudity is; this is done by things mentioned in Diseases of the Stomach.

Bleeding may be in the Feet, to provoke the Terms, if they be wanting. And they who are used to bleed and are full of crude Blood, may loose a little, because some crudity is there by evacuated, as appears when it is setled, at least it can do no hurt, if it cool not the bowels too much.

Sweating because it consumeth much of the Humor, both out of the Habit of the Body and the Veins, is good, because thereby the tumor decreaseth, and must be every day if they may be endured with Exercise, and Rubbing, and these alone do discuss the Matter.

Or they are provoked with *Guaicum* and *Sassaphras* boiled, or with other Softners that are not violent.

Or with this Decoction: Take *of Milium seed, peel'd, two ounces, of Spring-water two pints:* boil them to *four or five ounces* to the straining add as much *white wine,* let him drink it hot, it wonderfully provokes Sweat.

Syrup of St. Ambrose made after the like manner, doth the same thing, and it is pleasant to give to Children in the Dropsie.

Another Sweat: Take *Treacle one ounce and an half, of Calamus Aromaticus, a quarter of a pound:* boil them well stopped in a measure and an half *of red wine* till the third part be consumed: let him take a Draught every Night at Bed-time hot as much in the morning, to sweat.

Some drink *Treacle-water.*

The Rob or Juyce boiled thick *of Elder, or Dwarfe-elder, dissolved with convenient water, with the Decoction of Milium, or Flower de-luce water, or of Carduus benedictus,* may also be taken.

Attractives to strengthen the Bowels, take away Obstructions, and provoke Urin, to take away Hardness if there be any, as in the Ascites are also good, as we shewed in a cachexy, where you may take your choice, of Decoctions, Syrups, Juyces, Wines, stilled Waters, Oyls, Lyes, Urins, Natural waters. As drinking of Vitriol waters, with good caution, and to be forbidden, if the Stomach or Liver be weak or cold, also conserves, Pouders, Potions, Electuaries, Pills, which you may there chuse.

To which these may be added, good for to strengthen and help the Concoction of the Stomach, and to avoid crudity.

A good Decoction: Take *of opening Roots one ounce and an half, of Drop-wort one ounce, of Agrimony, Maiden hair, Germander, Groundpine, Dodder, Marjoram, each one handful, of Hyssop half a handful, of Anise seed, and Fennel seed, each one dram, of Elder flowers one pugil:* make *a Decoction with a little wine and water,* adding *a little Cinnamon, Spike, Schœnanth, and Sugar* for an Apozeme; For doses, if you will purge, add a little *Carthamus and Polypody.*

You may make wine of the Infusion of these things.

Or this Decoction experienced: Take *of Juniper-berries half a pound, of Elicampane, and Briony roots, each half an ounce, of Thyme, Marjoram, Rosemary, Topps of Rue, Mugwort, each half an handful:* boil them *in four pints of water, sweeten,* and perfume it, let him drink it some times.

Another: Take *of Rhapontick two ounces, of Wormwood, Horehound, Ceterach, each one handful:* boil them wine and water, to the consuming of the third part.

Or boil thus the *Roots of Acorus, Penny-royal, and Ivy.*

The Syrup of Wormwood is good against Crudity, and *of Betony, made of its Juyce with Sugar.*

Also *wormwood, and Betony-water mixed with other Openers, as with Enula, Marjoram, Mints boiled &c,*

Also mix Pouders for the Stomach with Openers, as *Diacalaminth, Diagalanga, Aromaticum rosatum,* and *Cordials* when they are weak, made of the Gems.

Also Pouders after Meat for Concoction.

Also *conserve and candied Betony, Acorus, Ginger, Marjoram, Stœchas, Rosemary, Citron barks, of both Bugloss, for* concoction and strength

Or this: Take *of the Conserve of Succory flowers, of Smallage roots, each one ounce, of the Conserve of Orris roots, of Marjoram, of Betony and Bugloss flowers, each half an ounce, of Gum Lack two scruples, Coral half a dram, of Cinnamon one dram, of Galangal, and Fennel seed, each half a dram of Spikenard half a scruple, of the ashes of Hens guts, and Gizard skins one scruple, with the Syrup of the five Roots, or the like:* make an Electuary: Let him drink water after it, made of proper things, and the Liver of a Wolf added, will make it better.

Or: Take *the aforesaid Conserves adding of the species of Triasantalon, or Diarrhodon, half a dram, of Diagalanga and Dialacca, each one scruple, of the ashes of Hens Gizard, skins and Guts, half a scruple:* mix them for an Electuary, it will be better to mix any cachectick Pouder mentioned in Discolouration.

This Electuary is good: Take *of Orris roots two drams, of bitter Almonds one ounce and an half, of Anise, and Fennel seeds each one dram, of Sugar the weight of all.*

These Pills are good, and also provoke the Terms, and Urin, and mollifie Tumors.

Take *of Rhubarb one dram and an half, of Gentian, and Birthwort roots, Madder, bitter Costus, each one dram, of Smallage seed, Ammeos, Juniper-berries, each half a dram, of Schœnanth, Spike, each one scruple, of Gum Lack one dram, and an half, Mastich half a dram, with Juyce of Orris, or Agrimony:* make Pills, or *with bitter Almonds, Troches, Pills of Gentian* better then the other. Take *of the extract of Gentian one dram, of Centaury the less, and Carduus each half a dram, of Rue, and Wormwood each one scruple, of the Pouder of the lesser Centaury, four scruples, of the Troches of Myrrh, one dram and an half, of the Troches of Agrimony and Capars, each one dram, of Wormwood half a dram, with the Elixir proprietatis,* make a Mass of Pills, the dose is from *two scruples to a dram* stronger are these.

Take *of Rhubarb, Madder roots, Valeria, Asarum, each one dram, of Savine, Marjoram, Smallage seeds, each half a dram, of Spike half a scruple, twelve Spanish Flies, the small*

wings

winges taken off of Ammoniack dissolved in strong Vinegar, one dram, with the Syrup of the five Roots, make a Mass, give from *half a dram* to two, drinking upon it the Decoction *of Pease and Parsley.*

Or, Take *of the aforesaid Pouder with the Gum dissolved, and bitter Almonds blanched, one ounce and an half, of Melon seeds two drams, with Syrup of Maudlin, or of Orris:* make an *Electuary, a dram is the dose, drinking after the Decoction of Melons or Pease.*

External Medicines mentioned in the Diseases of the Liver or Spleen are good, Oyntments, and Emplasters, Fomentations and the like, choosing the fittest for the Cause, to which you may add these following fit for the Stomach.

An Epithem for the Liver: Take *of Smallage roots, one ounce and an half, of Asarum half an ounce, of Wormwood one handful, of Bugloss, Borage, and Elder flowers, each one pugil, of Dodder seeds two drams, of Endive, and Sorrel seed, each one dram, of all the Sanders each one dram and an half, of Spike, Cassia Lignea, or Schænanth, each half a dram:* boil them in wine and water to foment the Liver, you may also anoint the Liver with the *ceroe of Sanders.*

Anoint the Stomach to expel Crudities thus: Take *of the Oyl of Wormwood, and Mints, each one ounce, Oyl of Mastich, Quinces, and Spike, each half an ounce, of Mastich two drams, of Sanders, and Cypress each one dram, Cloves half a dram, wood Aloes one scruple, Wax* as much as will make an Oyntment.

Or anoint with Nerve-Oyl Compound.

An Emplaster is made of the same *with Pouder of Wormwood, Mints, Mastich, with more wax, and Gallia moschata,* or the Emplaster for the Stomach.

For swollen places, to allay them somtimes, apply Discussives, and if water abound, Consumers, and many things mentioned in Ascites, as these.

Sweat is caused by dry Baths or moist, or Stuphes, and so the matter is consumed, and the Swellings, and sooner in this then Ascites, made of the things there mentioned.

If you cover the Body, except the Head, in sand or ashes as in Ascites, it is here better.

Foment the parts with Lye as there mentioned, rowl the parts about somtimes with Rowlers dipped in Lye.

Cataplasmes of Dungs as there mentioned, also baggs applyed to the parts with hot Discutients.

As for Diet, let the Air be convenient, then temperate, not moist, hot rather dry.

Let the Meat be of good Juyce and Concoction, seasoned with hot Dryers, good for the Stomach.

They say that the flesh of a Hedg-hog, is good against Leucophlegmacy.

Watchings are thought to do good by drying, but they hurt by weakning.

The Cure of Oedema.

The Tumors called *Oedemata*, which are especially about the Knees and Shoulders, and also about the Feet, and other parts being broad, comming from crude Juyce are difficulty cured, because they are the substance of the flesh increased: therefore they carry them to the Grave often.

The Cure of them is the general Medicines to the whol Body, and particular to the parts.

The general must be according to the cause to hinder crudity, and if it come from the want of concoction in the Stomach, Liver, Spleen, then because there is a Cachexy, which begets particular Tumors, that must be first cured, by good Diet, fit Evacuations by stool and sweat, and you must strengthen the Bowels, and oppose other Diseases, before you meddle with the particular Tumors. But if crude juyce cause an Oedema from the evil Habit of the part, then with respect to the Constitution to get good Blood and cleanse the body, for the better proceeding, the general Cure must preceed the particular.

The particular Cure of Oedema, is in the beginning and in the increase done by things which astringe, and repels by pressing the Juyce, which makes the part bigger, and when it is at the height you must use things that dry and digest it mixed with strengtheners, or drawing Medicines, or if it imposthumate, (as seldom,) such as ripen, and open, and at length heat the Ulcer, as follow.

Fomentations and Baths are used if if be large.

And at the beginning foment with a Spunge, to repel a new spunge is best, because its thought more binding, with Vinegar and Wine, or with strong Vinegar, and ironed water or the like.

After foment with Vinegar and Lye, or salt-water.

Afterwards when the Tumor is big, use salt-water alone or Nitrous Baths.

Or make them of Lye strained from *common Ashes, Vine branches or Oak, Beech, Willow, Fig-tree, or burnt Bones.*

It is stronger *with Allum, Salt, and Vinegar.*

And if you add the Plants, they will digest and strengthen, as *Dane-wort roots, Acorus, Docks, Sage, Rosemary, Marjoram, Betony, Bayes, Calaminth, Organ, Juniper topps, Rue, Savine, Mug-wort, Lavender, Chamomil, Lupines, Beanes, Jupiner-berries,* or the like hot things that are good for the Joynts.

Anoint after Fomentation in the beginning with this repeller: Take *of Bole half an ounce, Aloes three drams, Acacia, Sanguis Draconis, each two drams, of Cypress roots one dram, of Saffron half a dram, Vinegar one ounce and an half, Oyl of Roses three ounces, Turpentine,* as much as will make an Oyntment, or *Wax for a Cerote.*

Another in the increase of a Tumor: Take *of Quick-brimstone three drams, of Sal Gem. two drams, of Ashes common, or of Plants, one dram, Bean flower two ounces, strong Vinegar one ounce, Oyl of Nutmegs, and Turpentine,* as much as will make an Unguent, you may add also *the Juyce of Cole-worts.*

An Emplaster for the whol tumor: Take *of Labdanum one ounce and an half, of Frankincense one ounce, of Storax half an ounce, of Quick-brimstone six drams, of Allum, and Sal Niter each two drams, of Oak moss powdered, Wood, common woad Ashes, each one dram, of Acorus roots, and Lavender, each half a dram, of Saffron one scruple, of Cow Dung dryed, two drams:* mix them powdered, *with Vinegar,* and when they are dryed again, add *Turpentine, the Dregs of the Oyl of Rue, or of Lillies,* and make a Plaster.

The usual Plasters for this are *Diachylon, Ireatum, Ceroneum, Diachalcitees.*

A digesting Cataplasm: Take *of Lilly, or Marsh mallow roots, and Briony roots, each three ounces, the Roots of wild Cowcumber, two ounces, Dwarfe-elder, and Dock roots, each one ounce, of Sage, Rue, Tamarisk, or Savine, each one handful:* boil them in equal parts of Rain-water and wine, adding in the Conclusion *Vinegar three ounces:* beat them, and ad *Bean, or Orobus meale, two ounces, Lupine meale one ounce, the Ashes mentioned for a Lixivium half an ounce, of dryed Cows dung, six drams, Salt half an ounce, Leaven one ounce and an half, Hogs grease four ounces, Oyl of Chamomil, and Wall flowers, each three ounces:* make a Cataplasm.

You may add to them, *Snails, and the Juyces of Dwarfe-elder, and Docks, instead of the Plants, or Fennel.*

Clay made with Bone ashes, especially Mans bones, with bole and Saffron, Plantane, and Nightshade water, like a Cataplasm, hot applied, is of great force.

Also baggs filled with discussing Pouders, or Pouders sprinkled upon dry Spunges or wet, and so bound to the Tumor.

They are made *of Sage, Rosemary, Betony, Caraway, Carrot and Fennel seeds &c. with Maiden hair* to hinder the breeding of the Oedema.

If it tend to an Imposthume, you must use such things to bring it to Maturation as are mentioned in curing Impostumes.

To roule an Oedema well down with Bolsters, is good to hinder its groweth.

Also rubbing doth discuss, and the more if it be done with *Vinegar, and Roses, and Salt.*

To scarifie or burn with an Iron, tis good to abate an Oedema, if it be done in many parts of it: or to applie a Vesicatory *of Cantharides.*

When

The Cure of the Oedema of the Eye-brows

When the Eye-brows are swollen with a Tumor, it is cured as the rest, by general Medicines, if the Body be very moist, and by Topick to the place, so ordered that they hurt not the Eye, wherefore we use thick Oyntments, least they should run into the Eye, or sticking Plasters, which first repel and then digest, or if we will use a Fomentation, (we must leave out all sharp, sour, and salt things) and use that which is prescribed in the Weakness of the sight: or anoint the Eye-brows with the Oyntment there.

To which this following may be annexed: Take *of galls, or Cypress-nuts, two drams, Cummin seed one dram, Aloes, Myrrh, each two drams, Saffron one scruple, of Honey* as much as will make an Oyntment or Emplaster, to be laid upon the Eye-brows, the Eye being shut.

Also *Feaverfew*, and *Chickweed* beaten with *Barley meale* and applied.

The Cure of Tumors that come from a watery Humor shall be set down, first that which is general, as the dropsie ascites, then of the particular Tumor of the Feet and in the Groine, which falls into the Codd called *Hydrocele*; then of the Belly, as that of Women like Hydrocele of water, and that against the Navel called *Hydromphalon*, and in the Head called *Hydrocephalon*, and the Swelling of the Eye brows: Last of all we shall treat of the small Pustles in the Eyes called *Phlyctænæ*.

The Cure of the Dropsie Ascites.

If the Dropsie Ascites come from the dividing of the substance of the Liver or Spleen, by Driness, Hardness, or Scirrhus, or other Tumor or Ulcer, or total Corruption, or Stroak or Wound of the same, it is almost incurable; as when it comes from Hurt of the Kidneys, or breaking of the Bladder, or Ureters; or from the breaking of the Meseraick Veins with the Cawle of the Mesentery, or from Ulceration or Corruption of the same, it is incurable. But if it come from too much water, in the Passages of the gate and hollow Vein, and sweating from thence into the Belly, or distilling by Anastomosis or opening of the Vessels, it may be cured, so there be not caused a weakness of the Liver or Reins, or both Ureters be not so stopped that they cannot be opened, which is seldom seen. Or if the water in the Belly long contained, have not infected the Bowels and Caule, and Mesentery, as is usual. These things observed, if you know the cause, you may better foretell, but if you know it not, or doubt of it, you must speak less boldly of the Cure. But if the Urine be very red, it is dangerous, if white and crude, there is more Hope.

In the Cure of this, first consider the cause, if it come from the weakness of the Liver or Spleen, Coldness, Stoppage, Hardness, Scirrhus or any Tumor thereof, the cure is chiefly as the Cachexy, partly as the Jaundies, which come from the same cause, and go before the Dropsie, of which we have spoken so largely, that we shall not need to speak more. As also if it come from Heat and Dryness of the Bowels, we laid down the cure in Cachexy, which useth to go before it. But if it come rather from the weakness of the Kidney, or stoppage of the Ureters, you may cure it with Remedies mentioned in the Suppression of urine. After this consider action, let us bend our whole Force to get the water out of the Belly, before it corrupt the Bowels, by purging by Urine, and by Sweat, and if these will not do, we must use outward Applications and Openings. And this must be done in the Feet also, to take away their Swelling, and that when the water flows out, that which is in the Belly may come in its place: and if the Codds be swollen, you must apply things that may allay and consume the Swelling.

But in other causes which are hard or impossible to be removed, as when the Bowels are broken or cracked, by Heat and Driness, we must use rather cold and moist then hot and dry Remedies, which in all other Dropsies are used, as we shewed in cachexy that comes of the same cause; Also in Hardness of the Bowels or Swelling of the same, you must soften them with Medicines there mentioned: these are better to prevent a Dropsie then to cure it, in that cause, or when the Bowels or Vessels are hurt or corrupted. In these desparate cases, notwithstanding we must labour to abate the Symptomes, and take the water of the Feet and Belly, to hinder the shortness of breathing, and least the water continuing by its stinking and hurting the Bowels, should produce worse accidents, or breaking into the Feet by force, or by opening it should cause Inflammation and Gangræn, which causeth a miserable Death: all this is done by the following Remedies.

In this Dropsie, purging is good both to open Obstructions, and to carry away the water; of which they which are used to open Obstructions, especially in the Bowels, which cause a Cachexy and Jaundies, if these be with the Dropsie, are best: And in other Causes they are better then Hydragoga or water Purgers, because they provoke Nature to avoid it, and they are mixed with things proper for the Bowels. For the other that is Hydragoga, must violently provoke the expulsive Faculty if there be much water, and therefore they easily inflame the body by sharpness and burning, and except warily given, and well prepared, they knaw and burn up the Stomach and Bowels. Therefore use these as the last Remedies when all fail, yet if by chance Nature being moved thereby, may not onely send forth the water which is in the Veins, near and far off by the mouths of the Meseraick Vessels to the Guts again, which is easily done; but also that she might purge forth that which is in the belly, by the same way it came, as she doth often wonderfully: All these are done by these following Remedies.

The common Medicines which are good to open the obstructions of the Liver and Spleen, are mentioned in the Jaundies, and Cachexy and Leucophlegmacy, and these may be used here in the beginning to purge water, before we come to stronger Medicines. As Potions chiefly of Rhubarb, which is thought to be such a Friend to these parts, and other Purgers, *also solutive Electuaries, Catholicon, Diaphœnicon, of the Juyce of Roses*, and especially those made *of Hiera simple and compound, solutive Syrups of Roses, Fumitory, Epithymum, Polypody, and Pills of Hiera de tribus, of Rhubarb, Agarick, and Agregative*, the Forms of which may be found elsewhere.

But those Purges which are proper for the Ascites made of Water-purgers alone mixed, are as follow.

A Decoction to purge Water proper for the Liver and Spleen: Take *of the five opening Roots, two ounces, of Orris, Valerian, and five leaved grass Roots, each one ounce, of Asarum, half an ounce, of the bark of Tamarisk, Capars, Elder and Dwarfe-elder, each one ounce and an half, of Succory with the Roots, and Dandelion with the Roots, Endive, Sow-thistle, Liver-wort, Agrimony, Germander, Groundpine, Fumitory, of the five Capillars, each one handful, Flowers of Broom, Tamarisk, Elder, and Dwarfe-elder, of the four Cordial flowers, each one pugil, Flowers of the lesser Centaury, half a pugil, of the four great cold Seeds, half an ounce, of Anise, Fennel, and Parsley seeds, each two drams, of Dodder seed one dram, Ivy-berries three drams, Prunes five pair, Tamarinds one ounce and an half, Raisons stoned two ounces, of Senna, Polypody, and Carthamus seeds, each one ounce and an half, Epithymum two drams:* boil them in water with one quart of white Wine, and when it is strained, infuse *Agarick, Troches, half an ounce, Rhubarb three drams, Spike one scruple*, strain them and add as much *Sugar or Honey* as is sufficient to make an Apozeme, aromatize it *with Cinnamon for four doses.*

And if you add *one handful of Soldanella, or Sea bind weed, or of pot Mercury, or one dram of prepared Esula or half a handful of Spurge*, and if you take more, you may leave out *Rhubarb, and Agarick*, some add *Smallage roots*. And when it is thus strong, you must give the less quantity at first, that you may know their strength, and this is to be observed in other Medicines, always keeping good Order, and using Baths after if need be.

Another more simple Water-purger: Take *of Soldanella*

two

two ounces, Ivy-berries half an ounce, of Asarum roots, two drams, Aniſe-ſeeds three drams: boil them in water and wine, or a Decoction of the Simples mentioned for a Draught.

Or thus: Take *Liquoriſh one ounce, Elicampane half an ounce, Roots of Sowbread one ounce, Soldanella one handful, of Spurge or Laurel half an handful, of Raiſons ſtoned two ounces, Ivy-berries three drams, Fennel ſeed two drams*: boil them *in the Broath of grey Peaſe, add to the ſtrained Liquor, Sugar and Honey of Roſes*, as much as is ſufficient, let them boil a little, and add *two ounces of Wine and an half, Cinnamon, Schænanth, or Spike*, let him drink a little, and according to the Operation of that, let the reſt be given after. Medicines ſteeped in Wine or boiled therein, do work ſafer and better, and if a Dropſie can be cured, they will do it, we know this by Experience. Take *of Flower-de-luce roots one ounce and an half, of Succory, and Fennel roots, each one ounce, of Elicampane, or Maſter-wort, half an ounce, the barke of the Roots of Elder, and Dwarfe-elder, each one ounce, Wormwood three drams, of Germander, and Groundpine, each two drams, of Roſemary Topps one pugil, of Flowers of Centaury one dram, Fennel ſeed two drams, Caraway, Coriander, and Parſley ſeed, each one dram, Senna one ounce and an half, Agarick, or Briony roots prepared, or Mechoacan, half an ounce, Rhubarb two drams*, and if you wil have it ſtronger, *Turbith two drams*, ſlice them, and beat them all being dry, and infuſe them in *five or ſix pints of Wine*, and let him drink of it only ſteeped or boiled in a double Veſſel, one Draught, and as that worketh, let the reſt be after proportioned.

Or add to the aforeſaid *Genian roots, and Birthwort, each half an ounce, Aſarum two drams, the Bark of Bitter-ſweet ſix drams, Thyme one dram, Broom flowers one pugil, Ivy-berries, half an ounce, Smallage ſeed, one dram.*

And to make it purge water more, we ad to theſe wines, *Soldanella, or Sowbread roots, half an ounce*, and if we will have it ſtronger, in want of the *Flowers of Spurge*, we take *the prepared Bark of Spurge roots, or of black Hellebore, from one dram to one dram and an half, or half a dram of Coloquintida*: Theſe given in wine are ſafer, *with Spike, and Schænanth, each half a dram.*

If they be ſteeped in new Wine, or boiled with a little *Wormwood for the ſtomach ſake, Barkes of the Roots of Elder, or Dwarfe-elder, or the inward barke of Elders, or of Bitter-ſweet, or the ſeeds of ſpurge*, they are better.

Stronger are, *the Roots of wild Cowcumber, or Briony in Wine, or ſpurge Leaves alone, or with the ſeeds and flowers.*

Other Potions by Infuſion or Decoction in Wine, with Juyces, are thus made: Take *of Rhubarb, and Soldanella, each one dram, or four ſcruples*, infuſe them in wine, and give it being ſtrained, *with ſyrup of Roſes ſolmive.*

Or, Take *Rhubarb one dram, or four ſcruples, ſprinkle it with the Juyce of Flower-de luce, from half an ounce to ſix drams* or add *the Juyce of Elder roots*, and after ſufficient ſteeping put to it as much *Wormwood-wine* as will ſerve, ſtrain it hard, and give it, or with Syrups.

It is ſtronger if you ſteep *Rhubarb, in the Juyce of Sowbread, one dram and an half, or Juyce of Palmachriſti, half an ounce.*

Or, Take *Agarick one dram, Ginger two ſcruples, Sal Gem. one ſcruple, ſprinkle them with the Juyces aforeſaid, and with wine* ſtrain them, and give it.

A Potion made *of Cock broath* thus, is approved: Take *of Polypody of the Oak, two ounces, of Carthamus ſeeds bruiſed, one ounce, of green Flower-de-luce roots, one ounce and an half:* boil them *in Whey of Goats milk, or old Cock Broath, or ſtuff the Cock* with theſe, give a Draught with *the Ponder, or Orris, and Cinnamon, each one ſcruple*, uſe it often, you may ad more of the former to make it ſtronger.

The Juyce of Flower-de-luce from two drams to ſix, provokes Urine and ſtool, it alone hath often cured a Dropſie, and you may let it ſettle. Becauſe it inflames the jawes, you may give it with Wine, broath or Milk, or with Honey, or Sugar, with other things to make it taſt well, and ſuch as are good for the Liver.

Or you may make a Syrup of it, putting as much Sugar to the Juyce, and ſo keeping it, or boiling it to a body if it muſt be kept long: but then you muſt give a double quantity or more, as you perceive its Operation.

Or, Take *of Rhubarb infuſed in Wormwood-wine, and ſtrained, three drams, of the Juyce or Orris roots four ounces, of Cinnamon water half an ounce, of Sugar four ounces*: boil them *into a ſyrup give it from one ounce to one ounce and an half.*

The Juyce of Sowbread may be given the ſame way, crude or other Juyces, as *of Elder, Dwarfe-elder, Briony, or with the Infuſion of Rhubarb, or Agarick, made into ſyrups, as the Juyce of Flower-de-luce.*

There are *Fæculæ* or Dreggs made of *Briony roots*, both the *Dragons* and *Flower-de-luce*, to be given in this caſe, the Juyce is taken out of the Roots, and ſet in a cold place, till it have a branny ſetling, that which is thick and white, is poured from the Sediment or Setling. This is dried after it hath been ſprinkled with Roſe or Balm-water, and ſtirred often in divers broad Veſſels in the ſhaddow, till it be like Meal, this is to be kept in a dry place.

Or make the Juyce up thus, which is an approved Remedy: Take *of the middle Bark of green Elder, or of Bitter-ſweet which is in the middſt, two handfuls, of green Briony roots one ounce*: beat them well *with Wine and Vinegar, ſtrain out the Juyce*, give it twice or thrice.

The beſt of all is *the Juyce of wild Cowcumber prepared, called Elaterium, which is made of the Pulpy Juyce of them unripe, ſtrained through a ſieve*, to which add after the Decoction of *the parings of the Cowcumbers ſtrained*; Theſe ſtirred together are placed in the Sun or at the fire, covered with a Cloath, and when they have ſtood a while, you muſt pour off the water, and make that which remains into little Balls; It is made ſooner and better, if the Liquor be poured upon a Linnen-cloath, preſſed down in the middle being three times doubled and laid upon the aſhes, and what remains in the cloath be dried into Balls.

Thus it may be made ſooner: Take *the Juyce of the wild Cowcumber*, and boil it with four times as much Sugar to a Syrup or Electuary, mixing other things proper: Of all which you muſt give a little at firſt till you know the force of them.

The Extract of Juyce of ſpurge, made thick, and of Roots of Cuckow-pintles, black Hellebore, Euphorbium are all to be warily given, and the doſe is rather to be found out by Experience then preſcribed here.

The Extract of Eſula or Spurge, will do much in purging water, which is commended by *Ruland* in his Emperial Obſervations, and it may thus be prepared ſafer.

Take *of the leſſer ſpurge four parts, of both the Sow-thiſtles green, red Roſes, and Coriander ſeed prepared, each one part*: boil them with water at a gentle fire, ſkumming them alwaies till no more appears, and after pour it off by inclination, and put in more water, and boil it as before; This water being altogether or this whol Decoction, let it be evaporated, till it comes to the thickneſs of Honey; After pour on as much Spirit of Wine rectified, as will be the breadth of a Finger above it, let it ſtand in a cloſe ſtopt veſſel a while in a warm place, ſtirring it ſometimes, and then draw the Spirit of Wine in *Balneo Mariæ* by Evaporation, keep this Extract, the Doſe is from one ſcruple to half a dram, and more in ſtrong Bodies.

A Conſerve of the Leaves of Spurge, and Laurel, firſt ſteeped in Vinegar, then bruiſed and mixed with a double quantity of Honey, is given with Milk or Whey.

An Electuary of the dried Leaves of the ſame Herbs poudered and boyled with Honey, is given the ſame way.

Or this: Take *of Soldanella, Mezereon, or Widdow-waile ſteept in Vinegar, and dried, and poudered, of Senna three drams, of the Kernels of Carthamus ſeeds two drams, of Turbith three drams, of the Ponder of Orris roots one dram, Maſtick, Lack, each one dram and an half, with ſyrup of Roſes*: make an Electuary.

This is more ſafe; Take *of the Juyce of Flower-de-luce one ounce and an half, Honey one ounce*,: boil them gently, and

add at the end, *the ponder of Soldanella, six drams, ponder of Orris one dram, Cinnamon one dram and an half,* make an Electuary, let him begin with two drams.

Another highly commended Electuary: Take *of the juyce of wild Cowcumber, one of the Fruit and Roots, the Juyce of Laurel Leaves, of the Juyce of the purple Flower-de-luce roots, of the Juyce of Wormwood, and Agrimony each one ounce and an half* let them setle, and pour off the clear top by Inclination and with the thickest, mix *of Rhubarb, and Agarick each two drams; of Endive, Succory, and Purslain seeds, Mastick, Lack, Traganth, Sal Gem Spikenard each half an ounce; of pure Honey two drams,* set them in the Sun or a Furnace, and stir them often, till they grow to a thick consistance, give one dram for a dose.

Like this you may make it more excellent: Take *of the Juyces aforesaid one ounce and an half, of Vinegar of Roses one ounce, of the Infusion of Rhubarb three drams, of Agarick two drams, Sal Gem. one dram, white Wine six ounces, Cinnamon half an ounce,* steep and strain them, and add *Sugar and Honey of Roses each four ounces; Pulp of Quinces four ounces, Gum Traganth infused in Rose-water two ounces,* boil them to an Electuary, and add *Mastick, or the like, or leave out the Pulp, and with half a pound of Honey or Sugar,* boil them to a Syrup.

The usual Electuary to purge Water, is that *of Mezereon or Widow-waile made of the Leaves thereof, with Oyl, Honey, Agarick, Manna, Sugar, Quinces, and Whey,* Thus: Take *Agarick half an ounce, Rhubarb three drams, infuse them in Whey, and strain it, and dissolve therein ten drams of Manna, of Sugar, Pulp of Quinces, boiled a little with Vinegar, two ounces and an half, Oyl of sweet Almonds three drams:* boil them to an Electuary, mixing at the end *two drams and an half of Mezereon powdered, or of Laurel, or Esula first infused in Vinegar.*

There is another Electuary *of Esula or spurge called Alfebram in* Arabick, *made of Esula and Myrobalans, with juyce of Fennel,* by Insolation dried into a Body, which may be made as that *of Mezereon with Esula.*

There is also an Electuary of *Mesue* called *Diaphysalidon made of the Leaves of Mezereon steeped and prepared with Oyl of Mezereon, Scammony, Turbith, Agarick, Myrobalans, Manna, Cassia, Tamarinds, Raisons, Penidyes, Orris, Smallage and Fennel seeds, Wormwood, Rhubarb, with the Juyce of Endive, Smallage, Agrimony, Wormwood, Oyl of Jesamine. Benedicta Laxativa* which hath *Esula* in it, or *Hiera Hermetis with Mezereon,* are counted Water-purgers.

Some Water purging Pouders are given *with Wine, Milk, Chicken broath, or Cock broath, or some other Decoction, with Sugar, Honey of Roses, and Cinnamon and the like,* and being often used they work better, and if they be unpleasant they may be made into Pills.

The Pouder *of Soldanella* given often *from a dram and an half, to two drams, and Mechoacan or Briony root pouldered in the same quantity.*

The Roots of Dwarfe-elder, or Elder, to three drams of Asarum with new Wine.

The Pouder of the Bark of the Root of wild Cowcumber to one scruple given in new Wine, five seeds or more of Palma Christi *in pouder, also the Grana Regia of* Mesue, *from seven to ten or twelve,* their shells taken off, beaten and given in a rear Egg to avoid Vomiting, or in Figgs or Dates.

These are better if you mix them *with pouder of Rhubarb, Spike, Cinnamon, or Mastick.*

Or thus; Take *the Leaves of Soldanella one dram and an half, Senna two drams, Rhubarb one scruple, Sugar one dram:* make *a Pouder for one dose.*

Or; Take *Soldanella one dram and an half, Turbith one dram, Rhubarb half a dram, Ginger one scruple, Sugar one dram* make a Pouder, give it as the former, and if you put to it a little Esula prepared it will be stronger.

This is excellent. Take *Soldanella half a dram, Pouder of Grass-hoppers one scruple* give it with Broath.

Gum Sagapenum with Myrobalans or Rhubarb is given by some, very excellently if it be dissolved *in Vinegar and given with Aloes and Troches of Alhandal, or Scammony in form of a Pill often.*

Water purging Pills, are made with the Pills *of Rhubarb or Agarick or Aggregative, or of Euphorbium, or Sagapenum or the like, with Juyce of Flower-de-luce, or Sowbread, or of Palma Christi.*

The Pills of Rhasis made of Rhubarb purge water, and are these. Take *of Rhubarb one dram, and Agarick one dram and two scruples, Endive seeds one dram:* make them up *with Juyce of Endive, or Agrimony.*

Thus made they are safer: Take *of Rhubarb and Agarick each one dram and an half; of Spike half a scruple, with Juyce of Flower-de-luce, in which Spurge and Laurel and Euphorbium* have been steeped, make them up.

The Pills of Mezereon are in use made *of the Leaves of Mezereon five drams, steeped three daies in Vinegar, and one ounce of Myrobalans, with Manna, pulp of Tamarinds, and Endive water.*

If you take only *half the quantity of Myrobalans, and two drams of Rhubarb* and make them with the Infusion of *Traganth* they will be safer.

There are usual Pills also *of Elaterium made of three drams of Elaterium, Aloes two drams, Mastick one dram, with Juyce of Elder or Dwarfe-elder.*

Or, *half a scruple of Elaterium with half a dram of Mastick Pills or two scruples, or de Tribus, the Pills of Rhubarb, or Aggregative, or mix the Elaterium with Troches of Rhubarb, or of Lack.*

There are Pills of *Philonius* called *Hydrogoga made of Laurel steeped in Vinegar, Diagredium, Rhubarb, Myrobalans, Orris roots, Costus, Wormwood, Anise and Fennel seeds, wood Aloes, Lack, burnt Brass, and Juyce of Fennel.*

Clysters do also purge water, by the Meseraicks, is brought again into the Belly, which they do by cleansing and stirring up Nature, and by opening the Mouths of the Veins, thus made, and they also take down the Belly by expelling wind.

A gentle Clyster is thus made: Take *of Beets, Mercury, Pellitory, Cranes bill, or Dove foot, and Rue each three or four handfuls, Flowers of Elder, Broom, St. Johns-wort, Chamomil, Dill, white Lillies each three pugils or four, Caraway seeds half an ounce, Smallage seed, or the great or less hot seeds half an ounce, Senna one ounce and an half, of Carthamus seeds one ounce:* boil them *in Water,* and dissolve *Hiera benedicta, or Leaven half an ounce, Honey one ounce, Oyl of Bayse one ounce and an half, with a little salt,* make a Clyster.

It will be stronger with more Purgers, as *Agarick, or Turbith half an ounce, Asarum three drams, or with only a dram of Coloquintida,* leaving out the purging Electuaries.

It will purge water strongly by adding *a handful of Soldanella or spurge to the Decoction, or one ounce and an half of the Roots of wild Cowcumbers and as much of Sowbread, and Smallage roots.*

Another: Take *the Urine of a sound, cholerick Man, or Lixivium* which is not too strong, and dissolve in it *one ounce of stale Leaven, and one ounce and an half of Oyl of Rue,* and it will be stronger if you add *half an ounce of the Juyce of Flower-de-luce roots,* which may be added also to the former.

For other Evacuations, especially Sweats which bring the Water into the Feet and other parts, they are good, but not to be forced too much, for so they are hurtful, because the sick being in Bed and taking hot things is inward and outward in danger of Suffocation for want of Breath, therfore except they come freely, and in the declining of the Disease: for taking Swelling from the Feet, you must not sweat. But if the Party by inclined thereto and can sweat standing, use such as we shewed in Leucophlegmacy, which if they move not, Sweat yet will purge by Urin.

Evacuation by Vomit, because it shakes the Belly too much, and increaseth the shortness of breathing, it is hurtfull to some; yet in some if there be a Revulsion made by Vomits from the Meseraick Veins to the Stomach and Guts, or to take away something that causeth the water, if they be easie to vomit it may do well; as also if then thirsty they drink much water, to vomit it up again, *Rhasis* advi-

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viſeth to provoke Sneezing, to ſend the water to the Kidneys.

We can do little good by Blood-letting in a Dropſie, becauſe except there be another Diſeaſe joyned, as an Inflammation, it cannot help the Bowels, and it brings none of the water from the Belly, or Habit of the Body, nor out of the Meſeraicks, nor much of that which is in the branches of the hollow Vein. for we find that in Dropſies they bleed clear, thick and black Blood, by Experience. Yet if the Hæmorrhoid Veins uſe to bleed or do open themſelves, the water in the Meſeraicks may be ſent forth in great quantity thereby.

Water is often taken from the belly by cutting, burning, or pricking it, as alſo from the Codds and Feet.

And that which is done by tapping or pricking of the belly called *Paracenteſis* is the beſt, for by it all the water may be taken out of the belly, ſooner then by any other way. Therefore it is moſt uſual, and ought to be betimes before the water by long continuance defile the bowels, and the ſtrength decreaſe, becauſe this wound being made only ſlightly through the Skin, Muſcles, and Peritonæum brings no danger as the People ſuppoſe, nor can the Guts be thereby ſo made any wayes hurt, becauſe the Superficies of the Belly being ſtretched with water, is at ſuch a diſtance from them, and they lie, as is proved by diſſection, far ſeparated from the parts divided. Beſides it is impoſſible that the Patient ſhould eſcape, in regard the water can get out no other way by ſtool or urine, it is therefore better in a deſperate Condition, to try this Remedy as the laſt, then to leave the Patient, becauſe except the Greatneſs of the Cauſe do hinder, they may thus ſometimes be cured, or if they die, in regard they could not otherwiſe be cured, the Phyſitian by foretelling this, may keep his credit and his Conſcience clear. And the Patient ſhall get this benefit at leaſt, that when the water is let forth, he ſhal be freed from his great ſhortneſs of Breathing, and other internal Griefs, and ſo die in a more eaſie poſture.

But for the doing this handſomly, you muſt chooſe a place three fingers below the Navel, on the ſide, and there where the Muſcles of the lower Belly are oblique and tranſverſe, and lie upon the fleſh, becauſe you may better make a wound there, then in the middle under the Navel, where the nervous parts are of the Muſcles which make the white line which is Nervous. Therefore with an Inciſion knife, or ſome other fit Inſtrument make a wound through the Skin, Muſcles and Peritonæum gently, leaſt you hurt the Guts, and receive the water in a Baſon, which uſually guſheth forth violently.

And you muſt preſently ſhut the Oriſice again, leaſt it flow all forth at a time, and ſo take away the ſtrength, ſo that the water may be taken out by Degrees, dayly twice or thrice a little at a time, by cloſing the Oriſice without loſs of ſtrength, which muſt in the ſame time be reſtored with proper Remedies. In which we muſt have a ſpecial Care that we commit not an Error, and that we may ſtop the water when we pleaſe; which is done by putting in a hollow top which may ſhut the Oriſice, ſo that we may open it and ſhut it as we pleaſe; or if, before we make the Oriſice, we draw down the skin, and cut it tranſverſe as far as the Muſcles, and after cut within with an Inciſion knife: For then the lower Oriſice of the wound made firſt in the skin riſing when the skin is looſe, the inward Oriſice will be hid and ſtopped, and when the skin is drawn down again, it will be opened, and ſo we may keep and let out the water as we pleaſe, and prevent its flowing out at other times.

Moreover we muſt conſider when the water flow's forth whether it be clear and without evil Sent, for then it is a good ſign, becauſe we ſuppoſe from thence that the bowels are not yet putrified, but if it ſtink or be bloody, it is to be ſuppoſed evil.

A Puncture made in the Codd, as we ſhall ſhew in Hydrocele, doth not onely give vent and let out the water there, but if it be long kept open, it will take it from the Belly by degrees and by the ſame way that it firſt fell into the Cod; for which Cauſe, if the Puncture be not made in the belly, it may ſafely be made in the Codd: And this is the only way to cure any dropſie curable though it be neglected. Alſo we may take water from under the skin by Scarification. Which being made in the Feet, doth not only evacuate that which is there abouts; but becauſe other water comes alwaies in the room of that which is let out, it fetcheth it ſo from the upper parts and hollow of the Belly, that by long and plentiful Evacuation, it takes it from the Belly alſo, and it ceaſeth to ſwell. And this Scarification being uſual, is not refuſed by the ſick; although it may ſeem ſtrange, becauſe the water flowing may cauſe an Inflammation, and ſomtimes a Gangræn, and this may be thought to be from the Scarification which may be a reproach to the Phyſitian. That he may avoid this, he muſt foretel that this may come from the malignity of the water, when it begins to flow either by Inciſion or of it ſelf. Moreover the Scarification muſt be rightly made, and good Government uſed. And this is done by making it in the fleſhy parts of the Feet about the Ancle, or firſt trying in the Thigh, only cutting the ſcarſe skin which will drop, and then piercing the true skin gently, making Wounds broad and at a diſtance with a large inciſion Knife; and let the water that comes away be gently wiped off with a Linnen-cloath, without rubbing, and after let the Inflammation be taken away with white Oyntment and Juyces convenient, as of Nightſhade, Plantane, Henbane, or with the Leaves laid on: And let us chiefly take heed leaſt the Roulers or Bolſters be alwaies wet by changing them continually, or by anointing them with Goats ſuet, or Dears ſuet to keep them from taking water.

Some commend the Scarification of the whol Belly to the Nervous parts of the Muſcles, which cover the ſtraight Muſcles, to draw out water.

Alſo you may let out water by raiſing Bliſters in the feet and breaking them, and by keeping them open. And theſe uſe to come by the force of the water within the skin being ſharp and burning: Otherwiſe they are made by art, by light burning of the skin, by an actual Cautery: By theſe means one in a Dropſie was cured with a warming that burnt his Feet, being in the Bed at that time. Or this may be done by Veſicatories, foretelling alwaies the Danger of Inflammation and Gangræn, and by uſing gentle things, becauſe if you apply very hot things to raiſe Bliſters, you will cauſe Inflammation ſooner then by Scarification.

Moreover Water doth not onely flow by bliſtering the Feet, out of the whol Belly, but we ſometimes find the Navel enlarged with a clear Bladder full of water, by which being opened with no pain, the water hath all come forth with great force. And this way of Cure being ſo eaſie, might be by often applying Cupping-glaſſes to the Navel to raiſe it.

Water alſo may be let out by an Iſſue in the Feet, which would quickly cauſe Inflammation, if made with an actual Cautery; Therefore it is better to uſe a Potential cautery, which opens the skin by Mortification without pain (in the Feet if nothing hinder,) with ſuch Cautions as are before mentioned. And this may be done without Danger in the Cod, but not in the Belly, becauſe it is too thick.

Alſo if the Dropſie come from weakneſs of the Bowels, and fullneſs of Humors, from Obſtructions or Hardneſs, you may uſe altering Medicines ſuch as are mentioned in a Cachexy: And theſe are chief which are ſo compounded, that they dry up water and provoke Urin, as theſe following.

A Decoction. Take *of the five opening Roots, Succory, Flower-de luce each one ounce and an half; of Dandelion, five leaved Graſs, Dropwort, Valerian and Eryngus each one ounce; of Aſarum roots, half an ounce, of inner Bark of Tamariſk, Aſh, Elder, Capar roots each ſix drams; of Endive Agrimony, Horehound, Germander, Groundpine the Capilar Herbs, Burnet, Monſeare, Wormwood, and Cardous*

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us each one handful; of the Flowers of Elder, Broom, Tamarisk, St. Johns-wort, Bugloss, Borage, each one pugil; of the four great cold Seeds half an ounce, of the less cold Seeds three drams, Pease one pugil, of Smallage, Fennel, and Parsley seeds each two drams, of Raisons stoned two ounces, of Liquorish one ounce and an half, make a Decoction in water, and the fourth part wine, with as much Sugar as is sufficient, you may add the Juyce of Flower-de-luce, and a little Cinnamon, Schænanth, Spike, or Cassia Lignea, or Diarrhodon or Trionsantalon, &c.

To these may be added the Roots of white Carduus, Polypody, Fern, Docks, the great Celandine, Ash bark, Misleto of the Oak, Cleavers, Plantane, Devils bit, Hops, Mints, Hyssop, Poly mountane, Bettony, Penny-royal, Organ, Rue, Marjoram.

Another Decoction: Take *of the Roots of Fennel, and Parsley each one ounce, of Rhaponick two drams, of Wormwood Ceterach, Agrimony, each two drams, of the four great cold seeds each one dram; of Schænanth, and Spike each one dram:* boil them in chicken broath, or infuse them in Wine without the cold Seeds.

Rhasis hath a Potion much esteemed, of Wormwood, Dodder, Winter-cherries, Fumitory, the four great cold Seeds, Schænanth, and Spike in Whey.

Of simple Decoctions, that of Lignum vitæ is best, to provoke Urine, also a Decoction of Garlick and Madder with Honey, of the broad Plantane by it self, or with Lentils, as *Dioscorides*, who approves the Decoction of Organ with Figs, and of Pease with Rosemary, and of sweet cane, with Smallage seed.

A pound of Misleto of the Oak sliced in three pints of water boiled to half, is good if morning and evening four ounces be given, for a long time, you may sweeten it with Sugar, and a little Cinnamon.

A Decoction also of Earth-worms with things that provoke Urine, as Smallage roots, Orris, or Asarum, or the Bark of Elder roots, of Danewort, Ivy-berries.

Also Wormwood wine, for weak stomaches made with Sack, provokes Urine wonderfully: Also wine of Horehound and Squils.

Compound wines are made of many of the aforesaid mixed together, as; Take *Roots of Smallage, Fennel, and Flower-de-luce each one ounce and an half; Valerian, Acorus each one ounce; of Master-wort and Gentian, each half an ounce; Asarum and Squils, each two drams; of the Bark of the Root of Elder, or of Danewort, and Sassaphras each one ounce; of dried Wormwood, Horehound, Agrimony, Maiden hair, Germander, Carduus each two drams; the Tops of the lesser Centaury, Broom, and Tamarisk flowers each one dram; of dryed Elder-berries two drams, of Parsley, and Fennel seeds each one dram and an half; of Ameos, and Dill seed each one dram; of Cinnamon two drams, of Spike half a dram:* bruise them *for two or three quarts of wine.*

A Lye made of Bean stalks, or Juniper ashes dried in a Furnace, often strained or long steeped in water, drunk sometimes, hath often done good; And some have been recovered by drinking nothing else, but it hath been smal: Also that is good which is made of Broom ashes: Also that of Ivy, Bitter-sweet, and of Hedg Hyssop, and if wine be used instead of water or mixed therewith, it wil pierce the more; Or if you bind the Ashes aforesaid in a knot of Linnen, and steep it in wine, it will cure, especially if the Ashes are made of Plants not throughly burnt, but dried to ashes in an oven

I did much for one in a Dropsie with this Lye, when his Codds and Yard were swollen Take *of the Ashes of Vine and Bean stalks, and of Bitter-sweet, and Holly bark, and Juniper, all burnt in an Oven without flame each one handful;* pour a pottle of water thereon, and let it run through, till it grow a Lye, and then boil it, with Sugar, and skum it, and when it is cold, give it a relish with one ounce of Cinnamon water, let him drink thereof in the morning, and one hour before or after Supper three or four ounces.

The Chymists like the Salts made from thence better, as of Wormwood, Juniper, Hedg Hyssop, and Dwarfe-elder. If one drink their own Urin, or that of a young Boy it will provoke urine. *Dioscorides* commends the urine of a Goat drunk every day with Spikenard, distilled waters penetrat, much, if drunk often four ounces with wine.

Simple waters are of Elder, or Dwarfe-elder roots, and Flowers or Berries, of Orris roots and flowers, and of great Celandine: also of white Lillies, of Raddish, French beans and Dodder: and of other opening and diuretick Herbs, and Roots, among which the water of Sea Fennel is best: some commend a water distilled of Mans dung, and Tobacco water.

The Compound waters are made of the aforesaid, with Juyce of Flower-de luce, some add Cantharides, cinnamon, Spike, and Schænanth.

The Chymist make some stronger waters, which they give by spoonfulls, adding to the aforesaid, as celandine, Elder, &c. Tartar and Vitriol calcined, and a little Spirit of wine, or of Tartar and Vitriol alone with Flints burnt and poudered, they make a water which they after distil and account a secret.

Dioscorides gives the Juyce of Lazerpitium or Benjamin, with Figs, the Juyce of Brooklime with wine, some commend the Juyce of Tobacco, some the Extract of Juniper.

The Oyl of bastard Saffron, and the Oyls of the Salts aforesaid, are mixed with the former by the Chymists.

Those Compositions mentioned in a cachexy from weakness of Bowels, Obstructions and Hardness, are good because they provoke Urine.

Also Juleps, and the milky Potion made of Turpentine.

Also Electuaries, especially that we mentioned in a cachexy, when a Dropsie is feared, as that made of the Juyce of Elder, and Dwarfe-elder and Dialacca, and Diacurcuma.

Of the Compounds we may give the two last best, and of Simples the Pouder of the Tops of the lesser centaury, and of Sea wormwood.

Also Pouder of Dill with Wormwood or Horehound-wine.

Also the Pouder of a Wolfes Liver or Guts, or the Pouder or Ashes of Hens Guts, the Liver of a Cuckow, and Spleen of an Ass, or of a Colt, when the Spleen is affected, the Flesh of an Hedghog, the Body of a Bat with the Head taken off, Earth-worms, all dried and poudered, or burnt to ashes given alone, or with other Pouders in wine, syrup or water convenient, are thought proper for these Bowels distempered.

Spanish Flies also, or Grass-hoppers, or Crickets baked to a Pouder, and one scruple given with water or convenient Syrup or Milk provoketh Urine powerfully, also you may add cherry-tree, or Plum-tree Gum, to hinder their ulcerating.

Some commend burnt Brass, and Pouder of Load-stone.

Also the Pills mentioned in a cachexy, are good against the Dropsie that comes from thence. And these following are most powerful to provoke Urine. Take *of Cantharides without the thin wings half a scruple, Mastick six grains, Rhubarb half a dram,* pouder them finely, and make them up with Turpentine, or Fir-tree, Rosin two drams, adding the Infusion of Gum Traganth made in Violet water, and fresh Butter each half a dram; make them up with Sugar candy into Pills, give one dram at the first to try the strength of them.

Also we endeavor to consume water in the Belly and the parts below with outward Applications, such as draw it forth and digest or dry it into a Vapor.

You may make Fomentations and Baths for the belly and swollen Legs, and Codds, of Sea water, or salted water, or Suphur, nitrous or bituminous Waters, Artificial or Natural.

Or of a strong Lye, especially for the Feet, by straining water or wine through the ashes of Vines, Oak, Beech Beans, Cole-worts, Bones or the like, with Allum and Salt if you will have it stronger, with which you may wet clout, and lay them upon the Legs.

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Or you may make Fomentations and Baths of a Decoction of Wine, Bean water, or the like; chiefly of the roots and Leaves of Dwarfe-elder, alſo of Orris, Nettle, Celandine, Sowbread, the Bark of the Root of an Elm, and Fern, Centaury, Mezereon or Mountain-peper, Rue, Calaminth, Organ red Coleworts, chamomil flowers, Elder and the other Dryers, with Brimſtone, Salt or Allum, ſometimes Scales of Iron, and three drams of the Pouder of Graſs-Hoppers, or cantharides to provoke Urin alſo.

Or make this Fomentation: Take *of common Lye ten pints, Vineger one pint, Salt or Allum three ounces:* boil them with drying Plants, and foment the parts with a Spunge.

A Stove or dry Bath doth more dry and draw out the humors by ſweat, from the inferior parts, and the more violently, if you quench Flints in the bath to raiſe the fume: ſome have with good ſucceſs uſed Laurel boiled therein.

Alſo a Fume raiſed by Iron, Flints or Marchaſits quenched in Vinegar, or by Vinegar powered upon them, or upon a Mil-ſtone is good, and the rather if Dwarfe-elder be boiled firſt in the Vinegar.

Or jet quenched in Vinegar.

Cover the lower parts of the body with hot Sand, the Sea-ſand is beſt by reaſon of the ſalt which is drying, therefore *Dioſcorides* bid it be done at the Sea ſhore, other ſand will do the ſame with ſalt and aſhes.

This may be done alſo with aſhes alone, which are beſt when made of drying Herbs and Woods.

The ſame may be done in a heap of Corn, Malt, Bran, or trodden Grapes being hot.

Fill baggs with warm Sand, aſhes, and parched Salt, and apply them to the Belly and Feet; to which you may add drying Herbs, and the great or leſs hot Seeds.

In the Dropſie Aſcites, ſweat provoked with Dane-wort as followeth, takes down the Tumor. Take *a good quantity of Dane-wort fried without Water, and not burnt, lay it upon a Quilt or Blanket, upon which let the Patient lie and ſweat while he is able, refreſhing himſelf with Cordials that he may continue the longer in it.*

There are alſo divers Plaſters, Cataplaſms and Oyntments for ſwollen Bellies, and Feet and Codds, when full with water, to conſume it, with things proper for the bowels thus.

Of Simples, Raddiſh roots, or Acorus, Pepper-wort bruiſed raw, or boiled in ſtrong Vinegar, which with Watercreſſes, and Muſtard ſeed, they are ſtronger.

Alſo Onions beaten with Honey and Pepper, and applied, as *Dioſcorides* commends the Lyes of Oyl or Greaſs in an untan'd skin to rub upon the part.

The Root of a wild Cowcumber bruiſed and ſteeped twenty four hours in Vinegar of Squills, with twice as much Honey, is an excellent Medicine if boiled with a little Pouder of cummin.

Goats dung and Cow dung alſo applied to the belly, and Pigeons, and Hens dung alone, or mixed or boiled with the urin of a Boy, or Goat, or with Lye or with Wine, Vinegar or Oxymel ſimple or made of Squills, adding Sulphur, Niter or Salt.

Or, Take *of dryed Goats dung, or Cow dung, the Plaſter of Bay-berries each half a pound; the Aſhes of Snails or ſhell-fiſh half an ounce, of Vinegar and Honey as much as will make a Plaiſter.*

Another more excellent.

Take *of Pigeons dung, and Wine of the beſt each one pound; Vinegar three ounces, of Juyce of Dane-wort and Flower-de-luce each two ounces; Honey three ounces, Quick brimſtone one ounce, Salt or Niter half an ounce, of Flower of Beans or Lupines one ounce and an half:* boil them to thickneſs, adding at the end *Bay berries one ounce, Cummin ſeed half an ounce, Water-creſſe ſeed, Cypreſs roots, Elicampane each two drams; of Chamomil and Dill flowers each one pugil; of Turpentine as much as will make a Cataplaſm.*

Another is thus made: Take *of Goats dung or dried Cow dung four ounces, of Frankincenſe, Maſtich, and Myrrh each one ounce; Cypreſs roots and Coſtus each half an ounce; Cummin two drams, Brimſtone, Salt each three drams; as much Honey and Vinegar of Squills as will make a Plaiſter.*

Or, Take *of the aforeſaid Dungs two ounces, of Dove foot Rue, Pellitory, Dwarfe elder each three handfuls, boil them in Urin or Lye with Salt, Water and Wine;* beat them adding *Meal of Lupines, Bay berries each three ounces; Oyl of Rue two ounces, make a Cataplaſm.*

Snails bruiſed and applied are very good, *Dioſcorides* bids you uſe the ſhells alſo, therefore they muſt be dried and poudered, alſo the ſlime of Snails is good if you add as much Goats or Cow dung to the Snails, the Plaiſter wil be better, to which for the Bowels, you may add Maſtich, Spikenard, Schænanth and Aſarum.

Or thus, Take *Bay berries half an ounce, Cummin or Caraway ſeeds two drams, Water creſs ſeeds, Agnus Caſtus and ſtaphſacre each one dram; Orris roots three drams, Aſarum one dram, Maſtick and Myrrh each two drams; Mummy one dram, Spike and Schænanth each half a dram; Brimſtone three drams, burnt Salt two drams, the Aſhes of a Vine or Oak or of Snails, one dram,* make a fine Pouder, ſprinkle it with ſtrong Vinegar, and with ſo much Goat or Cow dung or Snails fleſh, make a Cataplaſm.

If the belly be anointed with ſome Juyces or Plaiſters made of them, water may be drawn forth, the Juyce of ſowbread, Dragons or Cuckow-pintles, wild Cowcumbers, Mezereon, Spurge, Laurel and Soldanella are beſt, then of Dwarfe-elder, Elder, Flower-de-luce, Birth-wort, Aſarum, Mercury, mix them with Bean or Lupine Meal or Orobus, adding ſomtimes Spike, Aſarum, Schænanth, and apply it like a Pultis very large about the Navel, or make them into an Oyntment.

Thus; Take *of the Juyce of wild Cowcumbers three ounces, Juyce of Sowbread or Dragons two ounces, Juyce of Spurge or Laurel one ounce, Juyce of Dwarfe-elder, and of Flower-de-luce each one ounce and an half, of Ox gall half an ounce, Oyl of Nuts, Squills and Butter each four ounces;* make a Decoction til the Juyces be partly conſumed, adding afterwards *one dram and an half of the pouder of Scammony, Coloquintida one dram, Euphorbium, two drams, of the Pouder of the Root of Sowbread,* if the Juyce be not in, *three drams, Wax as much as will make an Oyntment.*

If you boil a little of it with Honey, it wil be very ſtrong.

Or you may uſe the following Liquor to the parts ſwollen: Take *of the juyce of wild Cowcumbers one ounce and an half, the juyce of Dwarfe-elder and Flower-de-luce two ounces, the Leaves of Laurel, or Spurge one handful, of Turpentine twelve ounces, Myrrh half an ounce, Frankincenſe, and Maſtick each two drams; Nutmeg half an ounce, mix them and diſtil them.*

Or anoint with the Oyl following; Take *of Oyl of Nuts or Line ſeed one pound and an half, Wine and Vinegar of ſquils three ounces,* boyl in them *the Fruit or Leaves of wild Cowcumbers, alſo Mezereon or Laurel bruiſed three handfuls, of the Roots of Squills and Euphorbium each half an ounce:* ſtrain them for Uſe.

To theſe you may add Wormwood water to ſtrengthen the Bowels, and if the Liver be hurt, the Juyce of the Roots of comfrey, and boil them with Oxymel, adding Gum Ammoniack diſſolved in Vinegar of Squils, and mix Sanders, Spike, Dialacca, or Diacurcuma, and apply it to the whol Belly.

Other Applications are thus made: Take *of Sowbread roots one dram and an half, the Roots of Aſarum one dram, Birth-worth and Pellitory of Spain each half a dram; of Smallage, Rue, and Muſtard ſeed each two ſcruples, of Spike and Schænanth each half a dram, of Aſhes of Graſs hoppers, and Spaniſh Flies one ſcruple, of Oyl of Wormwood, Bayes or Rue each two ounces, of Oyl of Scorpions one ounce, with Bdellium diſſolved in Vinegar and Wax make a Liniment;* or with Orobus, Lupine, or Bean flower, a Pultis, or leaving out the Oyls mix the pouders and meales with juyce of wild Cowcumbers, Laurel, Sowbread or Dragons, and make an Oyntment or Cataplaſm which with Honey will ſtick better, or a Plaiſter with Pitch and Wax.

Or, Take *burnt Braſs two drams, Allum or Salt half an*

ounce, Orris three drams. Orobus meal one ounce, mix them as the other with Oyl of Squills or Juyces.

The usual Oyntment to anoint the Belly is that of Artenita or Sowbread is best, it is *Mesuas* and is made of Juyce of Sowbread, wild Cowcumbers, Vinegar, Ox gall, Aloes, Scammony, Coloquintida, Turbith, Mezereon, Euphorbium, Sagapenum, Myrrh, Polypody, Chamomil, Pepper, Ginger, Sal Gem. Oyl of Flower-de-luce, Butter and Wax.

There is another Oyntment of Sowbread which is good against a hard spleen made of the Juyce of Sowbread, Dwarfe-elder, Vinegar, Tamarisk, Polypody, Gum Ammoniack, Bdellium, capar Roots, Spikenard, and Oyl of Flower-de-luce.

Oyntment of Aregon is good in a Dropsie to anoint the Belly, it is made of Dragon Roots, wild cowcumbers, Pellitory, Briony, Laurel, Sage, Savine, Fleabane, Rosemary, Marjoram, wild Time, Rue, Bays, calaminths, Mastick, Olibanum, Euphorbium, with Ginger, Pepper, Oyl of Musk, Bayse, Petrolium, Bears grease, butter and wax.

The Oyntment called *Agrippa's* of *Nicolas* is used for the same, it is made of Briony roots, wild Cowcumbers, Squills, Orris, Dwarfe elder Water, caltrop, Oyl and Wax.

Applications to the bladder do provoke urin, which are described in the suppression of Urine, as that Fomentation of the Decoction of Garlick, Juyce of Dove-foot and boys Urine, also anointing with the Oyl of Scorpions and the like.

Some fume the Anus with such things as they do the belly and Feet, and anoint it with *Aqua vitæ*, and Oyl of Euphorbium, or castorium, and Juyce of Flower-de-luce, adding if they inflame, butter and oyl, cataplasmes will do the same, such as are used to the belly, the vertue of which wil come from the *Podex* to the belly.

They report that the stone in a water-snakes belly which she vomiteth into the water, when she is tyed by a string to her Tail, is of such force to consume water, that it presently consumes the water into which it falls, and if it be laid to the belly, consumes the water there also.

You must have regard to the Liver and Spleen, if distempered, with such Remedies as are prescribed in these Diseases, especially in a cachexy and Obstructions.

The Air must be dry, which is better then moist; Exercise, if they can beare it, doth discuss, Frictions or Rubbings do it more, especially if the Hands be anointed with Salt and Oyl, or Oyl and Water, and then if you rub till the skin be red.

Also Mustard seed and Urine rub'd upon the belly to make it red and discuss.

Cupping-glasses applied to the whol belly are good to discuss.

Watchings although they dry more then sleep doth, yet because they weaken and are troublesom to difficult breathers, you must not allow them much.

The Diet must be moderate, of good Juyce and easie concoction, abstaining from moist things, and roast is better then boil'd, they must abstain from salt, spiced and hot things which provoke Thirst: they may use Diureticks, or such as provoke Urine, as Parsley, Fennel, Rocket, and Cole-worts, Livers of Wolves, Foxes, Hens, and Larks are counted proper.

They must not forget Sallads which provoke urine and loosen the belly, made of yong Elder budds, and of Dwarfe-elder, first boiled a little, with much Oyl and a little Vinegar, and Sugar if they please.

Let them drink little, for it is hard wholly to forbear, yet when some have done it many daies, they have been cured, being their bowels were not hurt. Water drinking, especially much, is hurtful, with a little Vinegar, it will quench the Thirst better; thin sharp wine is good to provoke Urine, Vinegar is good sauce not only for the Spleen, but Liver and to quench Thirst.

The Cure of swollen Feet.

The spreading Tumor of the Feet differs from Oedema, it is softer and comes of crude and serous Juyce, and somtimes it is in one Foot, somtimes in an other, very large, somtimes in a certain place below or about the Ankles, or, as we have observed, upon the skin, which if it come after this or that manner without another Disease continueth long, and if it cease, it returns at certain times, it is harder to be cured in some that are accustomed to it, and it is hard to prevent from returning, except the body be very well purged from those Excrements and Humidities which Nature constantly sendeth to these inferior parts, and the return of them prevented. And this is done by a moderate and sparing Diet, and often purging, by sweating, somtimes for a week or two together, or for a moneth continually or by Urine, with other particular Evacuations, and altering Medicines, that consume these Humors, and such as strengthen the bowels, the weakness of which was the cause of them. These kinds of Medicines have been declared in Defluxions, and in the Joynt-gout which come from such watery Humors, and the like, and may be applied to this Disease.

As for outwards Medicines you must at first repel those Humors which make the Feet swell, applying such things as we said would strike back Oedematous Tumors spread abroad; then they are to be dried up and consumed, with such things as were propounded in the same case in the Dropsie Ascites, with Fomentations, Oyntments, and Plaisters. Roulers do excellently in this, to keep the Humors from returning, if daily with a long Rouler a Hands breadth, beginning at the foal of the Foot, you roul to the Knee in the morning before the Feet begin to swell, as they do in the day; and so let them be till they go to bed, or keep them so night and day which may be done with a soft Boot, or laced Stockin or other Arts.

The Cure of swollen feet after sickness.

Other Tumors that fall into the Feet after sickness by excrementitious Moisture that falls down, are taken for a good sign, and therefore neglected: For they either go away of their own accord, or after a little purging or sweating. But if these come from any hurt in the Bowels left by a Disease, then because it is the beginning of a dropsie, you must proceed as we have taught therein.

The Cure of a Hydrocele or Water-rupture.

If Hydrocele be joyned with Ascites and the Codds are filled with water as the belly, they are both dangerous: for the cure, it must be as the Ascites which must chiefly be regarded, for if the belly fall, the Codds will also cease swelling; And if not, then apply the outward Medicines mentioned in Ascites, as Fomentations, Fumes, Plaisters, &c: To the codds, as we shewed: let out the water by a Prick, and that which is in the belly will follow.

But if Hydrocele come of it self without any other Disease, and the codds alone be swollen, because it brings no great hinderance it is usually neglected at the first, but it must be cured by those Remedies mentioned in Ascites to let out the water. Among which the cataplasmes made of Goat and Cow dung, and the flesh of Snails onely are the best, leaving out the things which are prescribed for the bowels.

Or make this Pultis: Take *Goats or Cow dung one pound, of Snails boiled in Lye and cut small twelve, mix them with the dung, then boil them all with the remainder of the Lye, then add Bean flowers three ounces, Cummin seed half an ounce, Mustard seed one dram, Brimstone one ounce, the Ashes of Snail shells and Cabbage roots and stalks burnt, half an ounce:* mix them.

In the mean while foment the part with Lye to which there is added Salt and Brimstone.

Besides these you may use by turns things that consume water and astringe, and shut up the Passage by which water falls into the Codd, and also dry up the water.

Such as this is made of the dung aforesaid with the third part of Bole and Vinegar or Oxymel.

Or this, Take *Bran one pound, Bean flower four ounces, Cum-*

Cummin seeds two drams, Galls six drams, Hypocistis or Conserve of Sloes half an ounce, Allum two drams; boil them *in Oxymel to a Pultis.*

If the Tumor yet abate not, you must prick it, which is easily done without great pain in the lowest part of the cod, with an incision Knife thrust into the skin which is stretched out, and so let out the water, and press it forth till all be out, and then keep the wound some time open with a Tent, or with a seton or skein of Silk drawn through by another Orifice.

Besides this, if the Party be so subject to this Tumor that it returns again, you must thus prevent it, by hindering the increase of water in the Belly with good Diet, and such things as consume Water, as we shewed in the weakness of the Stomach; And if there be any fault perceived in the Bowels ordained for Sanguification or making of blood, you must use things mentioned in a Cachexy.

And if we perceive by the return of it again speedily, that this Swelling comes from the falling down of the Peritonæum, you must keep it up with such Remedies as were mentioned in fleshy Ruptures called *Epiplocele* and *Enterocele*; and if they prevail not, you must use a Truss or Ligature to keep it up, first making incision in the Groin, as in other Relaxations and Ruptures. And because this is dangerous for loss of life or one stone, it must not be done but upon great Necessity, especially in a Hydrocele which is less troublesom, and may be cured by a Punctnre.

The Cure of the watery Tumor in the Groin. The watery Tumor in the Groin, in Women being like the Hydrocele in men, is cured the same way, applying things that consume water.

The Cure of Hydromphalus of the Navel. The Cure of the Swelling about the Navel called *Hydromphalus*, is by external Applications and manual Operation.

The Cure of Hydrocephalus. The Hydrocephalus being a tumor of the Head, is hardly cured with outward Applications, because the skin is there so thick, that the matter cannot de digested, but when you have tried the best Medicines mentioned in Oedema and the Dropsie without success; you may easily cure it by cutting or burning, and the safer, because there is no danger of great loss of blood.

The Cure of swollen Eye-lidds. If the Eye-brows be swollen, either they fall by actual Heat, or by Fomentations, (the Eyes being shut) or discussing oyntments mentioned in the watery Oedema.

The Cure of Phlyctænæ. Phlyctænæ or little Bladders full of water either depart of themselves, or by pricking or cutting to let out the water, and then the cut may be cured.

The Cure of Hydroaæ. *Hydroaæ* or water Pustles are little and many, called *Saren* in high Dutch. If these vex by itching, because they argue much salt or cholerick Water, he must be purged, with things mentioned in the Itch, and they must be opened to let out the water, to which the itching calls the Nails, or they must be pricked with a Needle, and afterwards the Scabs are to be cured, as we shewed.

The Cure of Bladders in the Eyes was shewed when we speak of their pains, you must cure all windy Tumors as a Tympany of the belly, or as the puffing up of the whol body is cured, at first. And after it be in the Codd called *Pneumatocele*, or in the Throat called *Bronchocele*, or a *Physodes* you must look to Particulars.

There are three sorts of Tympanies, from divers causes, two are more usual, the first comes from wind onely in the Guts, the other from wind and water in the cavity of the belly; the third is very seldom which comes from wind only shut up in the cavity of the belly: we will declare what is to be done in all three.

The Cure of the Tympany of the Guts. The first kind of Tympany which comes from wind not gathered into the cavity of the Belly, but in the Stomach and Guts, which so stretcheth them, that the belly swelleth, if it come from rouling together of the Guts, or from some old Obstruction, and if the Guts be made exceeding thin thereby, so that they cannot again come to their former condition, or be broken as we have known, with a little force: It is for the most part desparate; but if this stretching or stoppage hath not been so old, so that it seems rather like a Cholick from wind, then a true Tympany, then there is Hope of cure.

And it is thus begun, by opening again the Passages of the Guts, and that speedily and chiefly with Glysters which by softning and pricking do loosen the Belly. and discuss the wind, or by purges such as are mentioned in the cholick, and in the binding of the belly; where we have been so large that we need not repeat them again.

The Cure of the Tympany joyned with Ascites. But in the other kind of Tympany, when wind and water in the cavity of the belly, cause it to swell, which is most treated of, because most usual, because the Tympany and Ascites meet being both dangerous the case is worse.

The Cure of this differs not much from that of Ascites, only you must respect the weakness of the Stomach which causeth wind, and whether the wind come from the Stomach, or from water turned into wind, you must regard both

And first you must purge with such Purgers as were mentioned in Cachexy and Leucophlegmacy, for to cleanse the belly and Stomach of Excrements, and then purge water, and wind.

You may use these following,

Take *of Liquorish one ounce and an half, opening Roots each one ounce; Valerian, Orris, and Elicampane each half an ounce; Asarum two drams, Mints, Betony, Horehound, Maiden-hair, Germander each one handful; Cordial flowers, Broom, Rosemary, and Lavender flowers each one pugil; Anise and Fennel seeds each two drams; Parsley, Sesili, Endive, Dodder seed each one dram; Melon seeds two drams, Raisons stoned one ounce, Senna and Carthamus seeds each one ounce and an half; Epithimum three drams*, and if you please *two drams of Soldanella*: boil them in water, and the third part wine, infuse *Rhubarb, Agarick and Mechoacan each half an ounce; Cinnamon, Ginger, and Sanders each one dram, Spike and Schænanth each half a dram; Sugar* as much as is sufficient for an Apozeme, for three or four doses.

Or make this wine. Take *of Succory roots, and Fennel roots each one ounce, of Orris and Elicampane each half an ounce of Gentian and Valerian each two drams; Wormwood, Mints, Groundpine, Ceterach each one handful; Topps of Centaury and Rosemary each one pugil; Fennel seed half an ounce, Caraway seed two drams, Senna one ounce and an half, Agarick, Rhubarb each half an ounce; Spike, Schenanth each half a dram*; infuse them in a sufficient quantity of wine, for four or five doses.

Also the Clysters mentioned in Anasarca and Ascites, or this for expelling Wind.

Take *Orris and Briony roots each one ounce and an half; Gentian half an ounce, Asarum two drams, Bark of Elder roots one ounce, Rue, Mother-wort, Horehound each one handful; Flowers of Centaury, Chamomil, Dill, Melilot, Elder, Lavender, and Rosemary each one pugil; Juniper and Bayberries six drams, Cummin, Caraway, or Fennel seeds half an ounce, Parsley seed two drams, Fænugreek three drams, Carthamus seeds half an ounce, Agarick three drams, Soldanella or Roots of wild Cowcumbers two drams*, (or leaving out the Purgers, we add a little Coloquintida) boil them in water and the third part wine or weak Lye, and in as much of the strained Liquor as is sufficient, dissolve *two drams of leaven, two ounces of Honey, three ounces of Oyl of Rue, and a little Salt*: make a *Clyster.*

You may leave out the Purgers in the Decoction, and dissolve *Hiera or benedicta Laxativa half an ounce, Juyce of Mer-*

Mercury and Flower-de-luce one ounce and an half.

Here alſo you may uſe altering Medicines which we ſaid were good in Dropſies in divers forms, chooſing thoſe that expell wind moſt or adding them.

You may make this Pouder. Take *of Valerian roots one dram, Orrice roots, Germander, Mints, each half a dram, Cummin ſeed prepared in Vinegar, Fennel and Caraway each one dram, the aſhes of the Guts of Hens or Wolves or of Earth-worms, half a dram*; make a pouder.

Or this Electuary. Take *of the Conſerve of the roots of Succory and Valerian each one ounce; Conſerve of Marjoram and candid Ginger each half an ounce; Pouder of Diacyminum and Diacurcuma each one dram; of the aſhes of Hens or Wolves guts, half a dram*, with the ſyrup *of the opening roots* make an *Electuary*.

You may apply outwardly things mentioned in Aſcites to the Belly, becauſe they diſcuſs Wind as wel as Water, chooſing thoſe that are moſt proper againſt Wind, or mixing ſuch things.

Emplaſters of Dungs mentioned are the beſt if they have many things in them that expel wind.

The Emplaſter of Bay-berries is excellent, alone or with others, againſt the Aſcites, and expels wind, made as I ſhewed in the weakneſs of the Stomach.

The Diet muſt be the ſame with that of Aſcites, and they muſt avoid all things that breed wind.

The Cure of a ſimple Tympany.

In the third kind of Tympany which comes from wind that gets out of the Stomach and Guts into the Cavity of the Belly and ſwels it, which is ſeldom; there is more danger than in the reſt and is thought the worſt kind of Dropſie, becauſe it comes from the ſame cauſe which the firſt kind of Tympany, a total obſtruction and convolution of the Guts and a thinneſs of the ſame extenuation and ſtretching and alſo becauſe wind can hardly be diſcuſſed out of the Belly. And the Diſeaſe wil be greater, and incurable, if the Stomach be very weak and cauſe theſe winds becauſe new wil breed from thence continually, as alſo if there be a ſolution in the Guts which makes way for wind into the Belly, and cannot be cured.

If this come from Coſtiveneſs of the Belly, it muſt be cured, as is mentioned in the firſt kind of Tympany, if it come from great weakneſs of the ſtomach, you muſt chiefly regard that and the expelling of wind, for which we have writ medicines at large in the weakneſs of the Stomach.

And give Purges of crude humors which are gathered by reaſon of the weakneſs of the Stomach, and are the cauſe of Wind, and expellers of Wind, ſuch were preſcribed in the cure of a weak Stomach.

We may uſe this following Decoction. Take *of Fennel and Parſley roots each one ounce; of Orrice and Elecampane roots each half an ounce: Wormwood two drams, Mints, Marjoram, each one dram; Roſemary, Lavender flowers, each one pugil; Aniſe and Fennel ſeeds each three drams; Caraway ſeed two drams: Carthamus ſeed bruiſed and Senna of each ſix drams*; boyl them in *Water* and *Wine* adding in the end *Rhubarb and Agarick each three drams; Cinnamon one dram, Spike one ſcruple*, diſſolve *Sugar* when it is ſtrained and let it be for divers doſes: or let all theſe be infuſed in *Wine* and let it be ſomtimes taken.

Another Potion. Take *Rhubarb four ſcruples, Spiknard one ſcruple, Agarick two ſcruples, Ginger one ſcruple*, ſteep them in *white Wine* and *Fennel water*, ſtrain it, and add *Diacarthamum and Diaphœnicon one dram.*

The Clyſters mentioned in weakneſs of the Stomach and in the Collick, to expell wind, are good here alſo.

Or this made for the purpoſe, Take *of Rue two handfuls, Chamomel flowers two pugils, Juniper or Bay berries one pugil, Cummin or Caraway ſeed ſix drams, Fennel ſeed half an ounce*, boyl them in *water* and *wine*, diſſolve *Honey, Oyl of Nuts, each two ounces; Oyl of Spike ſix drops*,

Or, Take *ſix ounces of Spaniſh wine, water of Chamomel flowers four ounces.*

Or Take *Rue water diſtilled as much as is fit with half an ounce of the ſpirit of wine* make an Injection.

Or, Take *Juniper berry water, or of Caraway ſeeds, Cummin, Fennel or Aniſe ſeeds*, it is very excellent to expell wind.

To theſe Wines and Waters for Glyſters you may add Juyce of Rue, Oyl of Rue, chamomil, Dillor Lillies, two or three ounces, with Honey.

Or make this of Oyl only: Take *Oyl of Rue four ounces, Oyl of Chamomil, Dill, Lillies each two ounces; Oyl of Spike Caraway or Cummin diſtilled ſix or ſeven drops.*

Altering Medicines to help the firſt concoction, and to hinder breeding of wind, and if bred to diſcuſs it, ſuch as were mentioned in the weakneſs of the Stomach, are here alſo good; of which the chief is Fennel or Aniſe ſeed wine, or of the barks of Fennel roots, broath made with Bay-berries, or with caraway ſeeds, caſtor drunk with wine: among the compound Pouders the fifth and the tenth, and that for after Meat made of Seeds: Lozenges made with Oyl of Aniſe ſeeds and Fennel ſeeds.

That Electuary which is chiefly for wind, and the like there ſet down.

A Pouder for the ſame, *Cummin ſeed* infuſed in wine, and dried again *two drams, Fennel ſeed one dram, Mints and dryed Marjoram each half a dram; Ginger one ſcruple, give one dram for a doſe, and if one ſcruple of Caſtor* be added, it will be excellent.

Or this Electuary: Take *Conſerve of Mints and Marjoram each one ounce; Conſerve of Roſemary, Lavender and candied Ginger each half an ounce; of Aniſe and Fennel ſeeds each one dram; Caraway and Cummin ſeeds each half a dram, or inſtead of the ſeeds, the ſpecies Dianiſi or Diacummi three drams, Cinnamon one dram, with ſyrup of Wormwood* make an Electuary.

You muſt apply things to ſtrengthen the Stomach, and eſpecially to the Belly to expel wind, ſuch as are mentioned in the weakneſs of the Stomach; as the ſimple and compound Oyls, and the Oyntment preſcribed againſt the Swelling of the Belly, cataplaſmes of Bread and Seeds, Fomentations of Penny-royal and Organ &c. bagges to expel wind of Galangal and Mints, of Bran and Millium.

To theſe may be added this Oyntment.

Take *Oyl of Rue two ounces, Oyl of Lillies, Mints, or Marjoram each one ounce; Juyce of Rue, Fennel and Aqua vitæ each one ounce and an half*; boyl them to the conſumption of the Juyces; and add the Pouder *of Cummin and Bay-berries each two drams; Wax* as much as will make an Oyntment. It wil be excellent if you leave out the Pouders, and put in *one ſcruple of the Oyl of Cummin, Caraway or Spike, and better with half a dram of Caſtor diſſolved in Aqua vitæ.*

Make a Cataplaſme of cow or Goats dung, boiled in ſtrong Wine, Urin and Lye, with Pouder of Cummin, caraway, Smallage ſeed, Bay-berries, Bean flowers, and Rue, and Salt and the like.

Or, Take *Rue, Hyſop, Wormwood and Figgs*: boyl them *in Wine or Urin and Vinegar*, beat them adding *Bean flowers and Bay-berries one pugil, and with a little Niter* make a cataplaſm.

It is good to foment the belly with theſe things following boyled in wine, as Orris roots, Elicampane, Rue, Mints, Marjoram, Roſemary, chamomil flowers, Dill, Bay-berries and Juniper berries, the hot Seeds and the like.

Or let the Fume of theſe be ſeat to the belly under the cloaths in the Bed.

Make a bag for to lay upon the belly of theſe; Take *of Millium ſeeds two pugils, Cummin ſeeds and Caraway each half a pugil, Bay-berries and Bran each one pugil, Melilot, Chamomil, Dill, Centaury and Roſemary flowers each one pugil; of burnt Salt half a pugil*; fry them in a Pan, ſprinkling wine and Vinegar and make a bag, you may add Rue ſeeds, Nigella, Seſili and Spices with Brimſtone.

Great Cupping-glaſſes that draw forth wind, and are thence called *Ventoſes*, applied to the Navel do powerfully draw wind forth, or apply many about the belly.

There muſt be a good Diet to prevent crudities and wind, for quantity and quality, and the motions of the Body and Mind muſt be ordered, as we ſhewed in the weakneſs of the Stomach.

When

The Cure of the general Swelling of the whol Body.

When the whol Body is ſwelled with wind which is ſeldom, as that called *Anaſarca*, which comes of crude Juyce, in regard it comes of a violent cauſe, or great Diſeaſe, it muſt be regarded; and if the cauſe be taken away, as when it is from poyſon by Antidotes, the Swelling will ceaſe. Or if it be a deadly Diſeaſe, which appears by the Tumor, it ends in Death with the Diſeaſe.

But to remove it if it continue, the cauſe muſt be taken away by Evacuations made by ſweat, and inſenſible Tranſpiration, and the wind expelled, with Treacle and other Opiates; if it come from poyſon, which reſiſt it, and provoke ſweat; alſo you may diſcuſs wind, and take away Swelling with Stoves and hot Fumes, ſuch as were mentioned in the Tympany.

The Cure of Pneumatocele, or windy Rupture.

If Pneumatocele come from wind and water in the Codds, firſt there muſt be a general way to hinder the comming of wind and water, and then outward Medicines muſt be applied, ſuch as were mentioned in the Tympany joyned with Aſcites, and thoſe mentioned in the Water-rupture called *Hydrocele*, for that which conſumes water, doth alſo diſcuſs wind, or if need be, you may open the part with a Lancet, and let out both wind and water.

But in a ſimple windy Rupture, the general Medicines to prevent wind, and diſcuſs, and particulars applied to the Codds, mentioned in the Tympany may be good, and the Emplaſter of Dungs is moſt excellent with half an ounce of Brimſtone.

Or this; Take *Bean flower half a pound, Bay-berry flower three ounces, Cummin ſeeds one ounce, pouder of Rue two drams, Niter one dram, Brimſtone three drams:* boyl them *in ſtrong Wine, with Aqua vitæ one ounce,* make *a Cataplaſm.*

Fomentations, Bags, Fumes, and Oyntments preſcribed in the Tympany are good here to the Codds.

Or this Oyntment; Take *Oyl of Rue three ounces, Oyl of Caſtor and Pepper, each one ounce; Oyl of Spike one ſcruple, Soap ſix drams, Aqua vitæ one ounce and an half, Gentian, Hermodactyls, of each one dram and an half; Pellitory and Sowbread roots, each one dram; Seeds of Cummin and Staphſagre, each half a dram; pouder of Earth-worms one ſcruple, Turpentine as much as will make an Unguent.*

Or make a Plaiſter thereof with Maſtick and Frankincenſe.

In all the kinds of Ruptures as in this, if that Herb of Geſners called *Nummularia* or *Money-wort* green or dried, be ſteept in Spirit of Wine with a little Horſe-tayl, and clouts dipped therein and applied, it is excellent.

Some commend highly Water Bettony, or the Clowns Wound-wort beaten with Roots, and boiled and applyed in this, and in the beginning of other Ruptures, and if uſed as the Former, it will be of more force.

The Cure of the Inflammation of the Codds.

In other Swellings from the Colick or Straines, when both Codds are diſtempered, in regard they quickly go away, there is no other care to be taken but to prevent them hereafter, which is by taking away the cauſe, leaſt it being often repeated, it brings a windy Rupture, therefore at the firſt appearance apply external Medicines, ſuch as we have declared for the cure of a windy Rupture, and hindering wind from comming into the Codds.

The Cure of Bronchocele or Throat rupture.

Bronchocele which is a Swelling of the Throat, if not quickly taken in hand before it comes to the full growth, can ſcarce be cured, but continues all the life with hindrance and Deformity, bringing hoarſneſs and ſhortneſs of wind very dangerous.

The cure although it for the moſt part conſiſts in purging of crude Humors, which are thought to be brought thither from the Head, and taking them from the ſwollen part; yet we, becauſe we ſay it comes from wind which is gotten in by the relaxing or tearing of a Membrane with the skin from the parts underneath, ſuppoſe that the chief care is to be taken in expelling wind, and what moiſture is there gathered, and to reſtore the relaxation and ſeparation; which is hard to be done, as we ſhewed in other Ruptures, beſides aſtringent things which ſhould do this being applied to the Throat, and ſtopping the Paſſages, eſpecially if before there be difficulty of breathing, will hinder breathing. Therefore this is harder to be cured then other Ruptures, in the Codds and Groins, becauſe alſo if we ſhould cut which is the laſt refuge we cannot make ſo good a Ligature.

Nevertheleſs, at the firſt before the Tumor is grown to the extremity, and before there is ſhortneſs of breathing, you may apply ſome aſtringents, ſtronger or weaker, with ſuch things as conſume wind and moiſture.

Therefore we may uſe the Emplaſter for Ruptures that is ordinary, or that of our preſcription with as much of the Emplaſter of Bay-berries, or other Seeds that diſcuſs wind, as cummin and the like.

Or cataplaſmes preſcribed in Hydrocele to aſtringe and diſcuſs, as that of Dung and Bole, and the other of Bran and Galls, for the ſame end and to unite the ſeparation of the membranes, if poſſible you may uſe ſome of thoſe which were preſcribed in Ruptures.

And it is found by Experience, that the Pouder of burnt Allum often given, hath done good by binding and drying, it may be given alone with wine half a dram in weight at a time, or with other diſcuſſing and drying Pouders.

Or thus: Take *of Orris roots and Galangal, each one dram and an half; of Penny-royal, Savory, Rupture wort, each half a dram; of Fennel and Aniſe ſeeds, each one dram; of Parſley ſeed half a dram, of long Pepper, Spikenard, Nutmeg and Cinnamon, each two drams; Myrrh half a dram, burnt Allum half an ounce, Sugar of Roſes as much as all the reſt, give one dram and an half in Wine.*

When this Tumor is confirmed, we muſt only mind the expelling of wind and water, and there are divers external Medicines in Hydrocele and Pneumatocele preſcribed for the ſame.

If they prevail not, you muſt uſe the ſtrongeſt, as: Take *of Briony roots, and Orris three ounces, of Roots of wild Cowcumbers, and Squills one ounce and an half, ſlice them, and boyl them in Wine, with Bean meal, and Orobus, each two ounces, bitter Almonds, and Peach kernels one ounce and an half, of Cummin ſeeds two drams, Pepper one dram:* beat them *with Oyl of Lillies, and Flower-de-luce three ounces for a Cataplaſm.*

Or this Plaiſter: Take *of Gum Ammoniack, Galbanum, and Bdellium diſſolved in ſtrong Vinegar, each two ounces; of Pulp of Coloquintida two ſcruples, Saffron one ſcruple, Sal Gem. and Allum, each one dram, with Pitch one ounce and an half; Pine or Fir-tree, Roſin two ounces:* diſſolve in the oldeſt oyl of Nuts for an Emplaſter, to theſe add for more ſtrength and ſweetneſs *Oyl of Spike or Caramay half a ſcruple, Oyntments of Oyl of Peppers or Caſtor,* muſt be uſed with the hands firſt dipp'd in *Aqua vitæ*, or make Unguents with the ſame, and the Pouders aforementioned.

Alſo Fomentations mentioned in Hydrocele and Tympany may be uſed here, eſpecially let the tumor be often fomented with a Linnen-clout dipp'd in *Aqua vitæ.*

The cure of the Tumors Phyſodes.

The tumors called *Phyſodes*, or thoſe which come of wind and water, which they call windy Oedemas, if they come of wind alone or thin water, fall again ſpeedily: but if the tumor be much and thick, they laſt longer.

In the cure of theſe, firſt take away the cauſe, if it be internal and feed the Diſtemper, and labour alſo to hinder wind from comming to the part, as alſo crudities and Humors, and if they be many, let them be evacuated, and diſperſed by external Remedies.

The general and particular Medicines for that, are mentioned

tioned in the third kind of Tympany, and in the windy Rupture and in the Throat-rupture.

But if they come from an external cause, and the Tumor arise from the attraction of the skin, or the Hands or Feet swell with cold, then when the cause is gone, they also vanish or they are dissolved by actual or potential Heat by Fomentations and Oyntments, as other Diseases and Pains comming from cold.

The cure of windy blisters called Phlyctænæ.

To these are referred Phlyctæne or Blysters of wind, which must be cured as watery Blysters, because when the scarse skin is taken off, there is water underneath.

The cure is divers in tumors that come from the Juyce which nourisheth the Parts, either abounding or being too thick; either as they are in glandulous Parts, or in fleshy Parts, as they are harder and softer, or as they are in Parts without Flesh.

The cure of Kernels.

The cure of tumors in Glandulous Parts comming from the nourishing juyce, is first of general Glanduls growing together in many parts then of particular, as of those in the Throat as Strumaes, and then of those behind the Ears called *Parotides*, and of those under the Arm holes and Groins, called *Bubos*, and last, of the Stones thus hardned.

The cure of Scrophula.

The general Kernels in many places together, are either Scrophulas in the Neck to the Chin, called also *Strumæ*, and are somtimes in other Parts; in regard they are usual, and hæreditary and common to some People, they require the chiefest care for cure; and this is not done without Labour and long time; somtimes it is incurable, when the Glanduls or Kernels are grown Scirrhous or hard, and will not yeld, or have great Venom as Cancers, then they turn into incurable Ulcers; somtimes though cure be done yet is not absolute, yet though they be taken away, yet they leave behind them great disturbances, as filthy and unequal Scars, and hinderances of the use of some parts, where they grew.

For the Cure of these, first consider the condition of the whol Body, see that it be well cleansed, by divers Evacuations and Alterations, having used Preparations for the same. Then give those things that consume a Scrophulous tumor, and discuss it, or if that cannot be, yet ripen and digest it, so that it may come to suppuration, and either break of it self, or be opened by Incision, and then use it, for the cure, as a corroding, cancerous Ulcer, into which somtimes they are converted. Somtimes when they are grown hard and scirrhous, and cannot otherwise be taken away, you may cut them or burn them off: as we shall shew.

Blood-letting if there be Plethory or Fullness, is good both to revel and draw from the part, as also to derive and send the Humors another way, and also Scarification.

They usually purge Flegm in this this Disease, because they suppose that it comes from a Defluxion of Rheum, not only when the Scrophula is in the Neck, but when it is in any other part: First they prepare Flegm, then they purge it with Potions, Decoctions, Pills, such as are described in the Treatise of Defluxions and flegmatick Diseases. But we labour to purge the Humors as we find them in the body, either plethorick or cacochymick that is over full, or over foul, with any Humors; and when there is aboundance of evil Humors we purge often, especially when many Scrophulas break foeth, because without so doing we shall never cure them.

If gentle Purges will serve, you may find them in former treatises; but if strong are required, you must use those mentioned in the Scab and French pox.

And when you purge, you may give this Syrup between, upon the dayes of rest, which hath in it, things proper for the cure of Scrophula: Take *of the opening Roots three ounces, of Orris, Acorns, Piony, each one ounce and an half; the Roots of the lesser Celandine, Crowfoot, Pepper wort, stinking Gladon, each one ounce; the Roots of round Birthwort, Pellitory, and Asarum, each half an ounce; of Squills prepared two drams, the Leaves of Fig-wort, Burnet, Mugwort, Raum, Betony, Marjoram, Maiden-hair, each one handful; Flowers of French Lavender, or of ordinary Lavender, Rosemary toppes, and Time, each one pugil; Broom flowers two pugils, Juniper-berries half a pugil, the great and less hot seeds six drams, Liquorish two ounces, Raisons one ounce, Polypody two ounces, senna three ounces, Turbith half an ounce*; make a Decoction when it is strained, add *of Honey or Sugar half a pound*: boyl them to such a consistance that it may keep.

It will be more strong, if instead of Turbith you take *two or three drams of Esula prepared, and infused in Oxymel, the Roots of wild Cucumbers half an ounce.* And stronger if you add *of black and white Hellebore, each one dram*; or some approve *Laurel or Dragons*, if you steep half the quantity of the Ingredients mentioned in Wine, it will work as much and more safely.

They use to add strong purging things to the things we shall mention for alteration, and give them a long time that the evil Humors may be purged, and also consumed in the part affected. Thus, take *of the pouder of white and black Hellebore, each two drams*, with the altering Pouders that shall be presently prescribed five ounces, mix them, and give one dram for four Weeks every morning, others add Diagredium, or give it with Frankincense, Coriander, Spike and other Spices.

They highly commend Euphorbium half a scruple, made into Pills, with the Juyce of Flower-de-luce, and given every third day.

Sweating, if there be many Scrophulas dispersed in the body, which shew abundance of Humors, is sometimes good, especially in flegmatick Bodies, not in hot and colerick, because it would inflame them: In which the Surgeons are deceived, when they go about to cure old external Diseases in colerick Bodies by sweating.

But when the body is flegmatick and fit for sweating, after purging you may somtimes sweat by fits, or constantly if for many daies together, using a slender Diet: as we shal shew in the cure of the French Pox.

We give in Scrophulas things that are drying and digesting, or that consume them by a secret Propriety. And they are to be continued long, because they remove gently. Therefore these Pouders which dry up Moistures in the Brain and Stomach before mentioned, especially those that dry most of all, as Ashes, are good in this case.

These Pouders following are to be given with wine, or other conveniency fasting for a long time together.

Take *of the pouder of a well dryed Sponge or burnt, so that it may be beaten, one dram*, give it fasting some Weeks together, you may mix Sugar or Spices to make it pleasant.

The Roots of Spurge-wort or stinking Gladon, Broom flowers, the Pouder of stone amiantus given as the former are also commended.

Or this Compound: Take *of the pouder of Sponge dryed as aforesaid, half an ounce, of the Sponge stone, Cuttle-bone, or Pumex stone, each two drams, the pouder of Egg-shells half a dram, burnt Acorns, Galls, Birthwort, each one dram; Plantane seeds, and Cinnamon, each half a dram; Pepper, Ginger, and Sal Gem. each one scruple*; make a Pouder.

Or thus: Take *Sponge one ounce, of Stone Amiantus, and Sponge stone, each six drams; of Burnet and Mugwort, each one dram, of Birthwort, and Pellitory, each a dram and an half*; make a Pouder, you may mix it with Spices.

To these you may add strong purgers, as white and black Hellebore, and Diagredium, as we said, to purge and consume the Scrophula.

Also Sea Sponge made of pouder or ashes given by it self, or with other Medicines: also the pouder of burnt Paper, and filings of steel.

The troches of Vipers and Ashes of Vipers, or the skin of the same, are esteemed consumers of Scrophulas, and to be mixed with others, also the skin of Snakes are as

good

good ; therefore you may often give that Treacle which hath the Troches of Vipers. *Dioſcorides* ſaith that Vipers Fleſh eaten is alſo excellent.

Conſerves of Roſes made with Honey or Sugar, or of Broom flowers two drams, is highly commended if often taken. Alſo the Conſerve of Spatula fœtida, or ſtinking Gladon takes away Scrophulas, according to *Pliny*.

Vulnerary Drinks as they cure Wounds and Ulcers, ſo do they cure Scrophulas, of which I have ſhewed divers ſorts, which may be uſed, as alſo this : Take *of Agrimony, Wintergreen, Saracens Conſound, Dropwort, or Burnet, Ceterach, red Coleworts, each one handful ; Comfrey roots four ounces, Liquoriſh one ounce and an half* : boyl them in the broath of grey Peaſe, or in the Decoction *of Guaicum in three pottles of Water, and the third part Wine*, till the third be conſumed, make it ſweet if the Patient loveth it ſo, let him drink it often.

There are Wines for the ſame, more proper to be drunk many dayes together ; as Wine wherein Pilwort bruiſed hath been long ſteeped or boiled.

Or this : Take *of the Roots of Dropwort, ſtinking Gladon, each one ounce and an half; Roots of five leaved Graſs one ounce, round Birthwort half an ounce, Pilwort, Burnet, Mouſeare, Agrimony, each one handful ; Mugwort, Tanſey, red Coleworts, each half an handful ; Broom flowers one pugil, Raddiſh ſeed two drams, Nettle ſeed one dram* : boyl them in Wine and Honey, let the ſtrained Liquor be drunk four ounces at a time, this muſt be continued.

Wine wherein a Mole hath been boyled is commended.

The Juyce of Pilewort, or of the Root of black Briony, or of great Penny-wort taken with Wine and Honey, or ſyrups made thereof, are good.

Let him drink for a long time Spaw, Waters of Niter, Allum, or Sulphur.

They commend the Stones of a young Boar to be eaten for to cure the ſame.

Some things cure the ſcrophula in the Neck, if they be held in the Mouth, as the Troches of Diaireos melting in the Mouth, eſpecially when the ſcrophula lies upon the rough Artery.

Alſo if you take ſome of the Pouder of Spunge aforeſaid and mix it with Honey like Troches or Lozenges, and hold them under the Tongue at night, it will cure the ſcrophula in the Neck.

To gargle or waſh the throat often with the Decoction of Orris, Pellitory, and other Plants in Wine, is accounted beneficial.

The Applications upon the tumor, muſt be made of things that digeſt ſtrongly, and conſume this thick juyce, mixed alwaies with Emollients, leaſt when the thin part is diſcuſſed, the thick ſhould grow harder, which if they tend to Maturation, may do much good. But if the ſcrophula comes it ſelf, or by art to open as an Impoſthume, you muſt cure it as an Ulcer. Theſe that digeſt, molliſie and ripen are applied in divers Forms, either by Baths or Fomentations, or by things that ſtick longer on.

We often apply fat and ſlimy things, as : Take *old Oyl of Olive, or of Nuts, Lillies, or Elder, of Flower-de-luce, or Wall flowers, and of bitter Almonds, each two ounces ; of Hens Geeſe, or Ducks Greaſe, the Mucilage of Line ſeed, and Fœnugreek, each one ounce and an half ; of the Marrow or Suet of a Calfe, Goat, or Dear, one ounce, of Wax* as much as wil make an Oyntment or a Cerot.

You may add ſtronger Oyls, as the Fæces or Dreggs of Olive Oyl, or of Lillies one ounce, or of Oyl of Caſtor, or Euphorbium half an ounce.

Or theſe ſtronger, as of Turpentine, Oyl of Saffron by Decoction, or of wild Cowcumbers, or Oyls where in other proper Plants, or their Juyces have been ſteeped or boiled ; as this : Take *the Juyce of Briony, Savine, or Rue, Celandine, each two ounces ; Vinegar of Squills three ounces, Aqua vitæ one ounce, Honey two ounces, old Oyl of Lillies and Orris, each two ounces and an half* ; boil them in the Conſumption of the Juyces.

You may add divers ſorts of Greaſe to theſe Oyntments, becauſe all molliſie, eſpecially of wild Beaſts, which they ſay digeſt alſo, Hogs and Mans Greaſe is chiefly commended, alſo Hens Greaſe, alſo of ſome Fiſhes, as of Eels, of wild Beaſts, as of a Wolf, Fox, a Badger, a Bear, a Lion, Elephant, Eſtrich, Vultur, Eagle, which as rare ſo are accounted precious.

The Fat which drops from a roaſting Gooſe which was firſt ſtuffed with many Mice, is highly commended.

Butter and Pilewort roots, which *Matthiolus* teacheth to be made thus : Take *the Roots gathered in Autumne, waſhed and bruiſed with freſh Butter*, and put them in a moiſt place fifteen daies in a pot well covered, then melt it gently, and ſtrain it.

You may ſteep or boyl the ſame Roots with Mice in oyl for the ſame.

Theſe are made of Gum : Take *of Gum Ammoniack, Bdellium, or Galbanum, each two ounces ; Opopanax one ounce and an half, diſſolve them in ordinary Wine Vinegar, or that of Squills, or Aqua vitæ, or both, with two or three ounces of the Oyls aforeſaid*, make a Liniment, or with Wax and Oyntment.

Or, Take *the aforeſaid Gums diſſolved, and mix them with the Fats and Greaſes aforeſaid.*

To theſe Gums add Serapinum, Elemi, or Labdanum, or Storax, Aloes, Frankincenſe, and Maſtick poudered half an ounce, and ſo make an Oyntment or Cerot ; or with wax and Roſin, and Pitch make a Plaiſter.

A Plaiſter of Wax, Roſin, and Pitch with ſome proper Greaſe, is good alſo.

Divers Applications are made of Plants, as this of roots : Take *Roots of black and white Briony four ounces*, if green, bruiſe them, if otherwiſe boyl them in Wine and Vinegar or both, or with Lye and pickle or brine, or Aqua vitæ, make a Cataplaſm, or with Honey, or Oyl or Greaſe.

You may thus prepare Orris, and Raddiſh roots, with Briony for the ſame Uſe.

Or to make them ſtronger do thus : Take *Briony roots four ounces, Orris two ounces, Dragons, Sowbread, each one ounce and an half* ; mix them as formerly, and with Roots of wild Cowcumbers it will be ſtronger, or Roots of ſtinking Gladon, or of reſt Harrow, or of Cane one ounce.

There is a good Application made of round headed Roots, as of Onions, Garlick, Lillies, Daffodills, roaſted under the Embers, or boiled and bruiſed, and mixed as the former ; and Squills boiled or roaſted are ſtronger.

You mix this and the former Cataplaſmes together.

Alſo of dryed Figs and Raiſons bruiſed, or a little boiled, and mixed with the round headed Cataplaſm, or with that of other Roots, are excellent.

Alſo Applications by *Dioſcorides* by Pileworts, Clowns al heal, Maiden-hair, the leſſer Houſleek, Capar roots, of five leaved Graſs, and Docks beaten or boiled, with the former, and Roots of Marſh-mallows.

The Herb Muſtard, and Leaves of Agnus caſtus, Savine, Pine, Cypreſs, Miſſeto, Pitch, or Reeds, with Arſemart, Spurge &c. are alſo commended.

The Miſſeto of an Oak, or Pear-tree beaten into an Oyntment, with Oyl of turpentine, doth ſoften and cure all hard Impoſthumes and Scrophulas.

Alſo Dungs of Beaſts, as Ox, Aſs, Boar, Goat, Pigeons dung, and of a wild Goat, Weezle, with Vinegar or Oxymel, or Greaſe, and Oyls.

Or with other Applications of Gums and Plants, or of Onions, Figs and Dung, make a Cataplaſm.

The blood of Weezles is commended by *Dioſcorides*.

The Gall alſo of a Turtle alone, or mixed with other things.

There are divers Pouders uſed, in Cataplaſmes, Oyntments, Plaiſters, or with the former.

The firſt is made of Seeds, as : Take *Line-ſeed, Fœnugreek, Beans, Lupines, Orobus, with Honey and Vinegar, or with Oxymel ſimple, or of Squills.*

Or, Take *one ounce and an half of the Pouder, and mix it*

with

with the fat Oyntment, or that of Gums, or with the Cataplasm of Roots, or Brounbread, and Figs.

Another more discussing is this: Take *of the Meals aforesaid three ounces, Mustard seed, or of Water-cresses two drams, Cummin and Nettle seed, each one dram*; mix them.

Another Pouder is made of Plants more proper: Take *of Cypress nuts half an ounce, of Birthwort, stinking Gladon, each two drams*; *Agnus Castus leaves, and Wormwood, each one dram*; *with a Snakes skin*: mix them as the other, or with the Oyntments or Cataplasmes aforesaid.

Another of Roots: Take *Orris, and Briony, each half an ounce*; *Roots of Sowbread, or wild Cowcumber three drams, Dragons two drams, Birthwort one dram*: mix them as the former, or with Oyls and Grease, or with Wax, Pitch and Rosin, make a Plaister.

Another strong Pouder: Take *Brimstone half an ounce, Sal Gem. or Niter, or the Froath of the Sea, or Pumex stone, each two drams*; *Mustard seed two drams, Nettle seed one dram, Marcasites, or Litharge one dram.*

Another is of the ashes of Juniper, Fig-tree, Cabbage stalks, Wormwood, Agnus Castus, Cray fish, Snails, Spunge, Ass Hoofes, and burnt Weezles, mix these with Oxymel or Vinegar, or with the former Pouders, and Applications.

Another Pouder is of the burnt Clay of an Oven, with Vinegar, mixed with the other.

Unslaked Lime with Honey and Grease, or other Compositions, is good.

Also Rust of Brass, or burnt Vitriol, mixed with the rest.

Dung dryed also to pouder, may be mixed as the rest.

The Emplaster of Diachylon with Orris, is the best composition, and it will be stronger with the Pouders aforesaid, and proper Oyls.

Galen hath a Plaister to take away Scrophulas, of Bdellium, Ammoniacum, Mustard and Nettle seed, Birthwort, Sea Foam, Brimstone, Oyl and Wax.

Oribasius hath another prescribed by *Mesue*.

The burning Oyl is excellent to take away Scrophulas without pain, and Fistulaes, and other Excrescenses thus made: Take *Oyl of Bricks, Mastick, Gum Arabick, Turpentine, each three drams*; pouder them, and with a Glass still draw an Oyl, mix it with Ashes of Ivy, and by a retort in Ashes or Sand, draw an Oyl,

Stupefactives or Narcoticks do dissolve, as we shewed, used externally, and are good here, as Mandraks, Henbane, Poppy bruised or boiled, or with Meals, with other Pouders and Liquors, make a Cataplasm.

The Juyce of them alone is good.

Also the distilled Water thereof, as; Take *Henbane, Hemlock, Celandine, Savine, each two handfuls*; *Spurge half a handful, Raddish roots three ounces, Dragons one ounce, Onions, and Garlick, each two ounces*; *Mustard seed half an ounce, Salt one ounce*; draw a Water.

This Emplaster of Opium is of great force: Take *of Opium one dram, Scammony two drams, Myrrh one dram, Saffron one scruple*: mix them with Honey.

Or this Oyntment: Take *of Gum Ammoniack, or Galbanum one ounce, dissolve them in Aqua vitæ, which is also narcotick, with Opium one dram, Henbane seeds two drams, Hens or Pigeons dung dryed half an ounce, Grease or Oyl*, as much as will make an Oyntment, or with Wax make a Cerot.

The Oyl of wild Cowcumber stufft into the Nose, is held good.

Roots also of Plantane and Sorrel hang'd about the Neck.

Also Fomentations with Spunges, prepare well for other Applications.

They are made of the Plants aforesaid, of which Cataplasmes are made, in Wine, Vinegar and Honey, Urin, Lye, Brine, or Smiths Forge water.

Or with other Herbs aforesaid, make this: Take *the two Roots of the first Cataplasm mentioned, or more of the second, add of the round Roots three or four, Figs twelve, of the Herbs mentioned three or four handfuls, Mustard seed two drams, Brimstone half an ounce, Salt two drams*: boyl them as aforesaid for a Fomentation, if you rub the tumor till it be red, it helpes to discuss, if done before other Applications.

Sometimes we cut away those that cannot otherwaies be cured: we first open the skin till it lyeth bare, and then we cut it out by the Roots; in doing of which, you must take heed of hurting a Nerve or other Vessel. For which cause when the Scrophula is under the Chin, and deep, it is dangerous; but if it be there, or in any part else, outwardly hanging forth, it is safer, provided that you cut not the kernels which are hardned between the Vessels, especially those in the Joynts, or a Nerve or Tendon, which will cause Contraction of the part.

We have often taken them off with a potential Cautery, which maketh an Eschar in the skin without pain, or made them better ripen with other Medicines thereby.

It is difficult to use potential or actual Cauteries that burn, because of Inflammation, but if the place be not dangerous, it may be done.

Some think that they are taken away, or kept from growing, if pricked with the finne of a thornback.

It is thought that some Kings have the Gift from God to cure them by touching, especially they of *France*, to whom they come at a set time in multitudes, also that the Kings of *England* have the same.

Some think that the seventh Son that comes in order without a Sister between hath the same Gift. I had a friend one *Pillo* in *France* that studied Physick, who told me that when he was a Child, he touched many publickly in the Church, using many superstitious Ceremonies.

The cure of Struma.

Struma, is either simple or compound, either in the throat or hanging therein: if it be hæreditary to the Countrey, and grown great and hard, is incurable, and not to be broken, but must be all the life, except it be cut off at the first: if it be not hæreditary, or belong to the Soyle or Country, you may attempt it, and after purging use Applications: you need not purge so often, as when there are many Scrophulas, except other Causes require it.

But you must mix those things which consume it, by which we have found that they have ceased growing, and vanished, being not confirmed. You may give things mentioned for Scrophulas, especially Pouders of Spunge, Amiantus stone, stinking Gladon, Broom flowers, and the Compound Pouders mentioned, and Conserves for vulnerary Drinks they will be needless, because it seldome ulcerates.

As for outward Applications, they must be stronger then those for a Scrophula, because a Struma is more difficult to be cured, and they must stick faster, as Emplasters of Gums or Cataplasmes of Roots, and Roundheads, and other Herbs, or of Dungs, with the stronger Pouders, as of Ashes and Lime, either by themselves, as mentioned, or with Vinegar, or other strong Liquor.

We take off Strumas by Incision, if they be confirmed, and be uncomely, and hinder breathing, as we do scrophulas, and it is safe when they hang out; but it is dangerous, when they are so rooted into the Vessels that they cannot be taken off without hurting them; and then it is better to let them alone, then to endanger the Patient, and dishonour your self.

It may be done also with a Cautery, as a scrophula.

I leave it to the Judgement of those who have seen it, whether the great Struma may be cured by a touch or not.

The cure of a Parotis, which is without pain

A cold Parotis is a kernel behind the Ears, hard, without pain. If it be old and scirrhous, it cannot be cured without cutting, but that which is young, and in the increase, or not quite hardned may be cured better then kernels in other parts, by Discussion or maturation or Imposthumation, or by Ulceration, by which means divers sorts of matter may flow forth, or come forth in a bag, sometimes hard as a Stone.

This

This Cure is done with some things used in Scrophula's, as first by Evacuations of the same sort, to take away plenty of Humors and Excrements, and altering Medicines to hinder the increase of thick Humors. And then by giving things that consume a Scrophula, there mentioned, if it last long. And because there is not so many Glanduls or Kernels as scrophulas, we need not use so many things.

Of those which were mentioned, these are fittest, things made of Gums, Plants, Roots, round Roots, Dungs, and Pouders.

And when it tends to Maturation, you must mix things that help it, as this Cataplasm made of Onions, or Lillies, Roots of Marsh-mallows, or Orris, baked under the Embers, and bruised with Figs, Meal of Lineseed, and Fœnugreek, Honey, Oyl, and Grease.

Or if it incline to break: Take *four ounces of baked Figs, Leaven one ounce and an half, green Flower-de-luce roots one ounce, Aloes two drams, Niter one dram*: mix them with Oyl and Grease.

Or you may ripen this Tumor with things mentioned for Imposthumes that follow Inflammation, and open it when it is ripe, and then cure it as an Ulcer.

If it be old and scirrhous, cut it out, as we shewed in Scrophula, or burn it off, taking heed of the great Vessels.

The Cure of Bubo without pain.

A cold Bubo, that is a swollen, hard Kernel without heat in the Groin, or Armpit, is sometimes scirrhous and incurable, as that of the Plague, which hath continued to my knowledg all their life: sometimes it may be discussed: but it seldom comes to an Imposthume, as that with Inflammation, and if it do, there will be a malignant Ulcer.

This must be ordered almost like the Parotis behind the Ear, with the like Evacuations first, and Alteratives, among which some of those which were good to cure Kernels, may be used for a Bubo.

Apply such things as are mentioned in Parotis and Scrophula, choosing those which most discuss and soften. And if it tend to Maturity, proceed as you did in Parotis and Impostbumes.

We cannot well use Incision or Cautery, because they lye too deep.

The Cure of hard and scirrhous Stones.

The Stones being swollen and hardned without Inflammation, (though Inflammation usually go before,) if they grow scirrhous, they so continue, and are troublesome, chiefly in riding. And if both Stones swell, and the spermatick Vessels grow hard, the Man will be unfit to get Children. But if this Tumor be looked to, in time it may be taken away.

In the Cure of this, having first used general Medicines, you must use more Digestives then Mollifiers in your applications, least Suppuration be too quick, and so the stones putrifie, and be lost as hath often been. And you must apply things mentioned in the Scrophula, Cataplasmes, Plaisters, and Fomentations which work powerfully.

And if it tend to an Imposthume, you must bring it to suppuration. As we shewed in Imposthumes open it, and cure it as an Ulcer.

If it will not yeeld to Medicines, but the Stones continue very hard, and painful, you must take them off by gelding, as we shewed in Sarcocele.

The Cure of Tumors which come of nourishing Juyce in fleshy parts, is as that of Scirrhus, and those in the belly which come from an internal scirrhus; and like the Cure of those which contain strange Matter, as Atheorema, Steatoma, Meliceris.

The Cure of Scirrhus.

When Scirrhus is in a fleshy part, whether it follow Inflammation which is usual, or grow of it self, which is seldom, and is either one, or more together; as in the Belly, sometimes there is a scirrhus in the flesh, or made of Glanduls or Kernels, when they grow hard and confirmed without sense of pain, which can neither be softned, dissussed or maturated, or made ripe, but if it be not grown to the height, but it is yet sensible, there is hope of Cure.

This Cure is to be attempted with strong Remedies, because weak will not prevail: first, disposing and ordering the Body, by Purgations if needful, or other Evacuations, so that if it be foul or supply the part with Humors, that may not hinder the work. But in respect of the scirrhus it self, especially if it come from Inflammation, which dryed up the Juyce, or from some thick Juyce which belongs to another part, brought hither: there is no necessity to follow the Custome of purging thick Humors: But rather to apply those things that mollifie the scirrhus, make it thin, and discuss it, these may be either mixed together, or applied severally.

The things prescribed for a scirrhus scrophula, may do well here.

When we desire to soften, we use Oyls, Fats, and Mucilages or slimes, and things made of Gums, and Gum drops, there mentioned.

Or this Cataplasm following: Take *Althæa or Marsh-mallow roots, and Lillies, each two ounces; Orris roots one ounce, the four mollifying Herbs, Orage, Colewortz, Pellitory of each about three handfuls; Chamomil and Melilot flowers, each one pugil; Line seed and Fænugreek, each one ounce and an half*; boyl them in Water or fat Broath, stamp them, and add *of Hens Grease, or Goose Grease or the like, about two ounces, Oyl of Olive, and of sweet Almonds, each one ounce*: make a Cataplasm.

Foment it often with a Decoction of the same Plants, or Oyl of Lillies, and of sweet Almonds, or Oyl in which emollient things have been boiled.

But when we intend to soften, and discuss, we must apply divers Roots, and Herbs, and Dungs, with Pouders, or the like, and Emplasters for the same.

Things good in a Scirrhus may be used here, as Raddish roots beaten with Nettle roots.

Onions roasted in the Embers, and beaten with the flesh of Snails, and other things.

Also Misleto with Time and Grease.

Also Pitch, or Rosin, with Wax and Grease, and Pouder of Marchasites called Fire stones.

The Blood of a Bull with Barley flower, or other Flowers.

Those Fomentations which we commended for scrophulas, may be used for to digest and soften a Scirrhus.

A Fumigation of Vinegar poured upon a hot stone, is good in a scirrhus; Or if you heat the Marcasites, or Fire-stones, and cast them into Vinegar, or if you quench Iron in Vinegar, and let the Vapor come to the Scirrhus.

If you rub a Scirrhus, as was shewed in Scrophula, before you use outward Applications, they will work the better.

It is Rashness to attempt to cut off a scirrhus, or burn it off, because it is deep rooted, that it cannot be taken off without Danger of much bleeding, and worse Inconveniency. Moreover it will be Labour in vain to take off part of it with pain, and leave the rest behind to grow again.

The Cure of Scirrhus, and Kernels in the Belly.

We have sufficiently shewed in a Cachexy, and in the Dropsie, how the Tumors in the upper part of the Belly, comming from the Scirrhus of the Liver or Spleen, are to be cured.

The Cure of Sirrhus in the Womb.

And if a Tumor come from a scirrhus in the bottom of the Womb, externally in the lower part of the Belly, it must be cured as a scirrhus, and we have shewed in the Inflammation of the Womb, how it is to be ordered, if it tend to an Inflammation. And though it be hard to be cured of what Cause soever it comes, yet it must be attempted for to abate it.

Wherefore after the Body is purged and prepared, we give such things as are mentioned in the Scirrhus of the Liver or spleen; as Pills of Ammoniacum and the like,

men-

mentioned in a Cachexy, which comes from that Scirrhus, you may apply the things mentioned for an outward Scirrhus and for Scrophula, when the Tumor is in the Belly to be felt hard.

As Fomentations of Oyls, or Decoctions, adding things that respect the Matrix. As Roots of Marsh-mallows, Lillies, Flower-de-luce, Briony, Mallows, Line seed, Fœnugreek, Figs, Flowers of Chamomil, Violets, Melilot, and other softners and digesters there mentioned, Mugwort, Nip, Flower of Featherfew, Elder, Dane-wort, Hops. And in the Declination, Calaminths, Penny-royal, Rosemary Flowers, and of French Lavender.

The Oyntments, Plaisters, and Cataplasmes mentioned in the External Scirrhus, are good here, made of Fats slimes, and Gums, and of Plants.

To these add things for the Matrix, as Rue, and Wormwood.

Also Roots of Mandraks, Henbane leaves, or Poppy or Hemlock, boiled in Wine, and made up with Oyl and Grease, are excellent, to which you may put Gums dissolved.

Dioscorides adviseth Wormwood, Rue, Flower of Lupines with Myrrh.

Galen, Goose blood, with Fœnugreek, or Lupines, Diachylon, with Orris, is the best ordinary Plaister, there are other Plaisters and Cerots mentioned in the Cure of Knots or Nodes.

Also Oyl of Myrtles, Storax and the like.

Also those Pessaries mentioned in the Scirrhus of the Womb comming of Inflammation, are good here, with the Oyls aforesaid, and Juyce of Fœnugreek.

The Cure of Atheroma, Steatoma & Meliceris.

Also the Fumigation there mentioned *Dioscorides* commends the Fume of Agrimony. Atheroma, Steatoma, and Meliceris are often without hurt, and therefore are neglected, and turn to Impost-humes: as the Tumors in the Head called *Talpæ* or Moles, and Testitudines, and Snails. The Cure is not so difficult, as that of scrophula and scirrhus, and they may be taken off when they hinder the part, as we said concerning the Atheroma under the Chin.

It is done as that of scrophula, struma, parotis, and scirrhus, by using first general means, * if need be as purging, and the like; and then applying particulars to the tumor, that dissolve, soften, and ripen, mentioned in Scrophula, and they will do it sooner in these Tumors, which are not so hard, and consume them, if not yet confirmed, or bring them to Impostumes, which must be broken and cured as an Ulcer.

Dioscorides commends Raysons stoned, beaten with Rue, to cure a Meliceris, also four Dock, with Oyl of Roses saffron, and Melilot. And for a Steatoma, Crowfoot flowers with a Cerot.

These are also good; Roots of Sowbread, Dragons, with old Grease, and Brimstone.

Unslaked Lime, with Grease or Oyl.

Dogs dung or the like with Vinegar.

* Gum Ammoniack, or Bdellium in Vinegar and Honey.

* Or this of Pitch: Take *Ship Pitch dissolved one ounce, Powder of Brimstone, half an ounce*; spread them upon Leather, take it off every day, and wipe it, and lay it on again, renewing it every fourth day.

Also Fomentations mentioned in scrophula and scirrhus are good.

Because these will not well open of themselves, we use Incision, not cutting the skin transverse, or cross, longwaies, or like a Myrtle leaf; and we take out the Membrane which containeth that thick, Suet-like or pap-like, or honey like Matter, from whence the tumors are named, and eat away what remains with cleansing Medicines: this done, we cure it as an Ulcer.

This may be done by an actual or potential Cautery, as in scrophula.

The Cure of soft tumors rising in fleshy parts from the nourishing Juyce, is by distinguishing those that have pain as the Condylomata or Tumors in the Anus or Matrix, the Cure of which is mentioned in the pains of those; for those that are without pain, some under the true skin called *Sarcomata* and *Sarcocele* in the Codds, and fleshy part of the womb; others only under the scarse skin, as the *Polypus* in the Nose, *Epulis* in the Mouth, *Encanthis* in the corner of the Eye: and excrescent or proud flesh in an Ulcer.

The Cure of Sarcoma, or Wenne.

The Sarcomata which grew here and there in the Body are under the skin, except you prevent them at first, cannot be easily cured, because they become like Natural Flesh, and a part of the Body: to consume it is impossible with potential things, therefore we take it off by cutting or burning, but if it cause no pain nor trouble, it is better let it alone, by reason of the danger through bleeding and hurt of Vessels.

If we will attempt the Cure, we must take it at first, and remove the Nourishment from it, by Blood-letting in some Vein nigh it, and by scarification and Cupping-glasses, the Body must be brought down with purges, sweats, and fasting.

Use externally Repellers, or things that strike back the Humors that breed it at first, such as are mentioned for the beginning of an Inflammation.

Then roul it hard with a plate of Lead upon it.

When it is grown great, in regard we can no way consume or ripen, it being mixed with the Veins, we must if we will take it off, use rather Incision, then burning, either taking it off with the skin, or without, bewaring of the Vessels underneath the great Veins, Artery and Nerves, and then stop the Blood, and cure it as an Ulcer.

In the lesser sarcoma, if you will not cut it off, onely open the skin, and consume the bare Flesh with actual or potential Cautery by degrees.

If these Wenns or Sarcomata, have but a small Root, or may be tied with a silk about the Root, you must tye it so hard, that the flesh may want Nourishment, and so decay; and being made senseless, it may be the better cut off.

You must dip your silk in Arsenick, or sublimate, that may burn the Root, and mortifie the Wenne; And because so doing, may cause Pain and Inflammation, it is better to dip it in our Cautery, that is without pain, which will turn into water by the Air, and to use it often.

I have taken off Wenns with a thred, not very straight bound at the Root, and a potential Cautery put into the circle which is made by tying with a sticking Plaister thereon.

The Cure of Sarcocele, or Flesh in the Codd.

When flesh grows to the stone in the Codd, it is called *Sarcocele*, and is sometimes very large, and will scarcely be stopped in its growth, or taken off any way, but by cutting, with gelding, and therefore is not meddled with.

If you will attempt it, you must have it in hand at the beginning, and open the Vein in the Foot often, to take away Blood from the part.

Applying astringents to the Codds that repel and hinder the groweth; such as were mentioned to hinder Defluxions upon the Eyes. And if they do not stop it when the flesh is in the Codd, and groweth not to the stone, it will be in vain to use Caustick to open the skin, or otherwaies, because the stone will be in as much danger of being lost by corrupting, as if it had been cut off.

Nor can softners do any thing, because it is not a scirrhus, but flesh, which being mollified will grow bigger, and drying things are best to harden it, hinder it from growth.

If the Patient weary of the burden, desire to have it off, let it be cut as a Hernia or Rupture in the Groine, opening the skin, and taking out the seminary Vessels, and the stone with the flesh growing thereto, tying the Vessels, and cutting it off beneath, this is gelding and dangerous. But it were safer, if the stone could be taken out, as when Hogs,

Dogs

Dogs, or other Creatures are gelt, which heal without any Care or Binding.

And if you take out the flesh, or part thereof without the Stone, the Stone must be put up, and you must heal the wound by Injections.

We may gather, that this cutting is not so dangerous in the Cod being cut, since it is a spungy part, which wil more easily be enlarged and contracted then other parts, and sooner. I have seen half the Cod taken off with a Bullet, and the right Stone lye bare with the spermatick Vessels, cured with Balsom of Sulphur, and a common Wound-Plaister.

The Cure of carnosity in the Womb.

Somtimes there is Carnosity or Flesh growing to the Womb, which hangs down, which rather hinders the Husband then the Wife, who is unwilling to make it known and therefore it is not meddled with, because also it is dangerous.

But at first, you may prevent the growth, as that of wenns, and if it must be taken off, you will either tye it, to stop the Nourishment, and make it wither, or burn it with a Caustick thred at the Root, which will cause Pain and Inflammation, therefore you had better use the Cautery without pain, above mentioned.

The Cure of Polypus.

The Cure of Polypus when great, is hard, but at first is more easie.

First, you must use Generals to hinder the Flux of Blood to the part, by Bloodletting; and purging if the body be foul.

The Applications to the part called Topicks, are Epuloticks or mild Healers or Dryers to cicatrize, or make a Scar. And if it be not confirmed, it may be often scarrified, or cut off, and these applied. If these prevail not, proceed to stronger, called *Cathereticks*, which eat the flesh, called Corrosives. And if these do not, you must use Caustick, which burn and consume and mortifie: Or at last cutting. These are of divers sorts, mentioned in the Cure of Impostlumes, for cicatrizing and corroding.

Pouders to cure a Polypus, are prescribed among those Remedies that cicatrize, or dry up both simple and Compound; the Corrosives mentioned, are of Hermodactils, black Hellebore, Borax, Pumex-stone, and Wine Lyes burnt, and this. Take *burnt Allum three drams*, or: Take *Vitriol four ounces, Allum &c.* Another is there stronger, with Vitriol and Arsenick, or use the pouder of Dragons, Grap-stones, and of Iron.

Soote which riseth from the smoak of things burnt at the Nose, when the Breath is held, doth dry excellently, if it be often, made of Frankincense, Mastick, Pitch, upon Coals, or if you make a Candle thereof with a wick, and after lighting, put it out, and hold it to the Nose.

It will dry more with Brimstone, and other Minerals.

Oyntments are applied with a Clout, or if very strong with a quill, least the parts adjacent should be touched. Of Cicatrizers, mentioned in an Ulcer, that is best, which begins thus, Take *of the sixth Pouder, half a dram, of Corrosives*, mentioned in an Ulcer, this is best, which begins with Take *Antimony &c.* And thus: Take *Hermodactyls, or Agrimony &c. Ægyptiacum* also mentioned in Fistulaes, or that made with Sublimate, or that which is mentioned for opening Impostlumes, of Sublimate, or Troches. Our Caustick made of Oyl of Bricks, and mentioned in Scrophula, which is called the Caustick without pain, is good.

If you will use milder, take the pouder of Dragons mentioned, make an Oyntment with Oxymel of Squills, or Juyce of Pomegranates, or Oyl.

Or the Juyce of the Peels and Stones of Pomegranates boiled forth with Oyl.

The Juyce of Dragons, also is good.

Or this strong Oyntment: Take *Ægyptiacum half an ounce, Pomegranate Peels, and Galls, each half a dram; Oyl of Vitriol one scruple.*

Or, Take *the strongest Vitriol, or Verdegreece, and mix them with Oyl or Honey, with Scales of Brass.*

It will be more strong with a little Arsenick or Sublimate.

There are Waters also for the same, to touch them with a Quill, or a little button of Lint.

These are mentioned in Fistula's, as that which begins thus. Take *of Verdegreece three drams &c.* Or thus, Take *of Orpiment one dram, Verdegreese three drams &c.* Or thus, Take *of Orpiment and Verdegreese, each one ounce &c.* Or that Receipt which is mentioned for the Cure of Impostlumes, and begins thus. Take *Vitriol and Arsenick &c.*

Also this stilled Water. Take *of Allum half a pound, Vitriol one ounce and an half, Galls, or Pouder of Pomegranate peels three ounces, of Oyl, or Syrup of Grapes two ounces, or Juyce of green Grapes:* mix them with strong Vinegar, and distil a Water thereof, with which often wash the Polypus.

The Oyl of Vitriol is stronger.

Or this: Take *Oyl of Vitriol one scruple, burnt Allum two drams, dissolve them in Plantane-water.*

Another most powerful. Take *Sublimate two drams*, boyl it *in Smiths Forge-water, three ounces to half*, and use it alone, *or with Oyl of Vitriol half a scruple, burnt Allum half a dram, Aqua fortis with Orpiment*, also cureth it.

The Oyl appointed for Fistula's, which begins thus, Take *Antimony &c.* Is also good.

Cauteries of Time, burnt Tartar, and those which are without pain, being warily applied with a Quill, to defend the parts adjacent, do cure it.

This is done sooner by an actual Cautery, or hot Iron through an Iron quill.

We also cut it off with an Instrument, first made hot in the fire, to hinder bleeding.

The Cure of ranke flesh in the Gums.

That flesh which grows over the teeth, because it only hinders chewing by bleeding is not much regarded, because it goes away by chewing.

But if it grow over the Grinders, then you must wash the Mouth with dryers and astringents, such as are mentioned in the Ulcers of the Mouth, and use things to rub the teeth such as were prescribed in Foulness of teeth.

The pouder Lapis Prunellæ, or spirit of Salt-peeter, or of common Salt, must be applied with a Pencil.

If these help not, use stronger, as the Oyntment of Dragon pouder, and that made of Oyl and Juyces, mentioned in Polypus, or Oyl of Vitriol, as there mentioned.

Or this, when the teeth are covered. Take *Allum half a pound, Vitriol &c.* As is there prescribed, or Aqua fortis, and touch the superficies of the Gums, and not the Roots, least the teeth grow loose, defend therefore the parts in the time of Operation, and wash the Mouth well afterward.

The Cure of Epulis.

Epulis is a little flesh growing at the roots of the teeth, it hinders not, though in a Defluxion, it is somtimes bigger, and goes away of it self, therefore it is neglected.

But if it hinder chewing, and cause pain, then take it away with astringent, Mouth waters, such as are mentioned in the consuming of the Gums, with Care, as aforesaid.

But if it hang down with a slender Root, and may be tyed, it may be so cured.

The Cure of Encanthis.

Encanthis is a Caruncle in the corner of the Eye, which is troublesom, therefore you must prevent the Blood which comes thither, as we shewed in Ophthalmy, or Diseases of the Eyes.

We use outwardly dryers and astringents, such as are prescribed in Ulcers of the Eyes, by which it will quickly be cured.

But if not, use stronger Remedies, so that you hurt not the Eye, or take away all the flesh, which will cause a Rhyas which is worse; therefore proceed by degrees from mild things to the strongest. These are all mentioned in the Cure of the Eyes, and taking away Filmes, and will be as good for this.

This Water is most excellent, and is also good for other Ulcers.

Take

Take a Copper Veſſel, fill it with Spring water, or rain-water which is better, and put therein an indifferent quantity of unſlaked Lime, and let it ſtand, till it is ſetles to four quarts of the clear water, add, (if you make it for the eyes) half an ounce of Sublimate, and if for foul Ulcers, an ounce, and let it fall to the bottom, and will be yellow, pour off the clear water, and keep, this with you muſt gently touch the Caruncle in the Eye, but waſh the foul Ulcer ſoundly.

The Cure of proud Fleſh.

When Fleſh grows rank in an Ulcer, if it be not skin'd, it is eaſily cured, as we ſhewed in an Ulcer, but if it be cicatrized, and grown over with skin, it muſt be cured as a Wenne.

The Cure of tumors growing in parts without fleſh, is firſt of thoſe in the Joynts, as a Ganglion and Nodes which grow alſo upon the bare Bones; as alſo of thoſe of the Nails, and then of thoſe which grow to the skin, as Warts, Cornes and Callus: and laſtly, of Freckles and Tumors, like a Barley corn, called *Hordeoli*.

The Cure of Ganglion.

A Ganglion is a tumor in the Joynts, and though it be ſofter then a Scirrhus; yet is it hard to be cured, if of long continuance, ſometimes it is incurable, but being deep rooted, it hinders the motion of the Joynt, and ſo of the Membrane. This muſt be prevented before the tumor be confirmed.

And we muſt uſe all means to diſcuſs it, or make it leſs, ſo that the Joynt may move. And this after fitting Evacuations, mentioned before in hard and ſoft Tumors, muſt be done by topical or outward Remedies, that ſoften and digeſt, being wary as may be, leaſt it come to ſuppuration; becauſe when it is come to matter, either of it ſelf, or by neglect, it cauſeth perverſe and incurable Ulcers, which do ſo corrupt theſe Nervous Parts, that the motion of the Joynt is either hindered, or utterly loſt thereby. But by manual Operation, ſomthing may be done, as I ſhall ſhew.

The Applications external, muſt be the ſame that were preſcribed in Scrophula, which mollifie and digeſt, adding things proper for the Nerves, and increaſing the quantity thereof, to make them prevalent.

It may be done by Fomentations, or Baths thus made. Take *Lilly roots, and Marſh-mallow, Briony, and Orris roots, each two ounces; Mallows and Colewort, each two handfuls; Henbane one handful, Groundpine, or Sage, and Wormwood, each half a handful; Chamomil, Melilot, Wall flowers, or Elder-flowers, each one pugil, Line ſeed, and Fænugreek, each one ounce; Bay-berries half an ounce:* boyl them in Water and Wine, or Lye for a Fomentation, or in greater quantity for a Bath.

To theſe may be added ſtronger, as Roots of wild Cowcumber, Dragons, Sowbread.

Or the Fomentations mentioned in Scrophula, with theſe mentioned here.

Alſo a Decoction of Frogs, and Earth-worms, or if that will not do, of ſtrong Vinegar alone, or in which Mil-ſtone or Fire-ſtone hath been quenched.

Or a Lye made of Aſhes, eſpecially of Fig-tree; or Urin, or the like mentioned in Scrophula, with the things here mentioned.

Alſo Oyl of Earth-worms, and of Frogs, or of Savine.

A Plaiſter of Galbanum, in which a little Opium is diſſolved, with ſome drops of the diſtilled Oyl of Savine, is good to ſoften and diſcuſs a Ganglion. If they ſit long in hot Brimſtone Baths, uſing them for a month, this Tumor will be diſcuſſed, and the Limb relaxed. For which Cauſe, let them be ſent to the Bath betimes, and uſe it as a remedy.

The Oyntments, Cataplaſmes, and Plaiſters mentioned in Scrophula, are good here alſo, becauſe proper for the Nerves; as thoſe fat and gummy things and ſlimy, or of Plants, Dungs, Pouders, with Oyl of Earth-worms, Foxes, Frogs, for the Nerves. The Greaſe of a Man, Bear, Badger, or Fox.

Alſo this Plaiſter. Take *Pitch two ounces, diſſolved in Oyl of Earth-worms, and Orris one ounce and an half, with Labdanum, Maſtick, each two drams; Storax one dram, aſhes of Earth worms half a dram.*

Alſo this Cataplaſm. Take *the Kernels of old Wall-nuts three ounces, Meal of Lupines, or Orobus one ounce and an half, Raddiſh, and Flower-de-luce roots, each one ounce; Honey as much as is ſufficient with Salt:* mix them.

A Fume alſo of Vinegar, in which Fire Stones have been quenched.

Or this: Take *Benjamin, Storax, each two drams; Myrrh and Bdellium, each one dram; Orris roots half a dram, Marcaſites two drams, with Turpentine,* make Troches for a fume.

You muſt beware of Inciſion, becauſe it can ſcarce be made without danger to the Tendons, Ligaments, and Nerves,

We may uſe other manual Operations, by which though a Ganglion cannot be taken away, yet the Limb may be rectified.

It is dangerous to open a Ganglion, as I ſhewed.

It was declared in the Treatiſe of contracted Members, how when it comes from a tumor, they may be reduced by Art and Inſtruments.

Knots or Nodes in fleſhleſs parts, are of three ſorts, either in the Joynts as the Gout, in the bare Bone as in the Pox, and Head-ach, or from ſome violent Cauſe, called callous Nodes: we ſhall ſpeak of them ſeverally.

The Cure of Knots or Nodes in the Gout.

The Gout Nodes in the Joynts of the Hands, or Feet and elſewhere, are hardly diſcuſſed, and when they are opened they produce ſome humor, or ſandy ſtone, or they grow hard, and fixed in the joynts ſo that the Fingers or Toes are either ſtraight out, or crooked, as I ſhewed in the Gout.

But to hinder their growth, or to diſcuſs, or ripen them; you muſt firſt uſe the Cure for the Gout, which is the cauſe by Evacuations and things mentioned againſt the Gout, which are ſo ſtrong, that if the quantity of a ſmall Nut be taken for a month or a year, it would diſſolve the Nodes of the Gout, which they ſay this following will alſo do.

Take *St. Johns-wort, Germander, Groundpine, each ſix drams; Tops of leſſer Centaury half an ounce, Roots of round Birthwort, Valerian, Spiknel, Hermodactyls, Agarick, each three drams, Roots of Gentian, and Parſley, each two drams; Spikenard one dram:* pouder them well, and with Honey make an Electuary.

Alſo apply things to mollifie and diſcuſs, or ripen, as to other tumors, but the ſtrongeſt are theſe.

A Cataplaſm: Take *Roots of Marſh-mallows two ounces, Flower-de-luce one ounce, Line ſeed half an ounce:* boyl them *in Wine and Honey, with a little Turpentine,* apply them.

Theſe are moſt proper, the Roots of wild Hemp, Teaſles Stone Crop, Groundſel, Hemlock, and Henbane green and beaten, or boiled firſt in Wine or Vinegar, with Honey or Oxymel, and ſomtimes Greaſe.

Or, Take *Rue, Shepheards purſe, and Raiſons,* beat them together.

The Heads of Onions and Garlick, roaſted and boiled with Greaſe of a Hen, Badger, or Mountain-mouſe.

Rotten Apples applied, are good.

Ammoniacum, Sagapenum, Galbanum diſſolved in ſtrong Vinegar, or Oxymel with Bran, Oyl of Turpentine.

Or, Take *Galbanum melted in ſtrong Vinegar, one ounce and an half, Birdlime, or Glew, moiſtened with Vinegar, Turpentine and Wax, each half an ounce;* mix them.

Dogs or Goats dung, with Wine and Vinegar, and Barley meal, is alſo good.

Alſo old ſtrong Cheeſe, of Sheeps Milk, beaten and applied.

The Roots and Seeds of Gith, pouder of Orris, with wax laid conſtantly thereon.

Alſo the Pouder of Oak-moſs, or Hazel-moſs, with French Soap, and Niter.

The Aſhes of Willow Bark, with ſtrong Vinegar.

Or this. Take *of Oker two drams, the Aſhes of Willow-*

Bark,

Barks, Nigella seeds, each one dram; dryed Dogs dung one dram and an half, make a pouder, and mix it with old Cheese, adding, if you please Gum and Vinegar.

Also the Juyce of Capars, and Oyl of Indian Nuts.

You may apply Fomentations to the Nodes, and they work best; first wash with warm water, or an emollient Decoction.

Fomentations are most used to consume hard gravel Tumors, and strengthen the part made with red Wine, Marsh-mallows, Mallows, Docks, &c.

Or thus: Take *Sea, or salt Water ten pottles, boyl therein one pound of Guaicum, of Guaicum bark four ounces, Wormwood, Groundpine, Bettony, French Lavender, red Roses, each six handfuls; Orris roots one ounce and an half,* boyl them to six pottles, then add twelve pottles of red Wine, and boyl them till the the fourth part be consumed, strain them, and use it for Fomentations, for twenty dayes.

If you fume the part with the same Decoction through a Pipe, it will discuss the Hardness, and strengthen the Part, as hath been experienced.

Also it is good to put the part into a Wine-press, first of moist, then of dry Grapes.

You may also open Nodes, by cutting and letting out the Matter, and they will either fall, or the Medicines applied, will have better Operation.

The Cure of Nodes or Knots in the French Pox, and Head-ach.

The Nodes in the French Pox, in the Fore-head, Shinns, and Backs of the Hands, because they require a general Cure proper for the Pox, and also some particulars, they shall be declared in the Cure of the Pox.

The Nodes in the Head-ach, in the Fore-head vanish when the Head-ach is gone, usually; but if they remain, you must evacuate, and use external Applications mentioned.

Of Callous Nodes.

The callous Nodes which come not from a Disease, which eates the Periostium or skin upon the Bone, but from over much Nourishment by Bone Juyce, so that it seems to be a new Bone growing to the other: Or which come after a broken bone are hard to be taken off, but continue the whol Life.

But if they be offensive, we shall study to remove them with outward Remedies: Not using Evacuations, because they come from an outward Cause.

We may apply things mentioned for the Gout, or for Scrophula.

And we know by Experience, that Narcoticks, or Stupefactives do much, by which we have dissolved desperate Nodes, in Men, and Beasts: Taking the Roots of Mandracks, Leaves of Henbane, and Hemlock boiled in Vinegar, for a Fomentation, and Cataplasm, to which Bee-nettles may be added.

Plaisters and Oyntments of Quick-silver, are as good here as in the Pox.

To soften Nodes, use the Cerot of Oesypum, which is made of Oyl of Chamomil, Orris, Oesypum, or Grease of Sheeps-wool, Rosin, Turpentine, Mastick, Wax, Spikenard, and Saffron.

Also the Plaister of the Son of *Zachary* made of Nerve-Oyl, Oesypum, or Grease of Sheep-wool, Goose grease, Marrow of a Cow bone, Turpentine, Bdellium, Ammoniacum, Mastick, Storax, Aloes, Fœnugreek, and Chamomil, with Saffron.

There is another of Calfes suet, Olibanum, Juyce of Squills, and Wax; also the Oesypum'd Plaister of *Paul*, and the Diapente of *Democritus*.

The Nodes are somtimes cut off, especially when they grow towards the Joynts, and hinder the Motion. And this Operation is safest, when they are upon the bare bone only covered with the skin. This is done, first by opening the skin, and laying them bare, and then with a sharp knife with one cut, taking them from the Bone, and by curing the wound, which may be done by burning, but not safely nor quickly.

The Cure of the callous Tumor of the Nails.

If the Callous Tumors of the Nailes come from any Hurt, it will be gone as the Nails, grow out, and are paired.

But if from an internal Cause, they become uneven, and thick, they will not be made thin; yet we must attempt it, if we suppose the Distemper of the Body was the Cause, by removing that, and by external Remedies, Emplasters, and Baths which soften that we may still cut off the Tumor, that the new Nails may grow thinner.

The Cure of the Callus, or thickness of the Skin.

A Callus in the Hands, is a sign of labour, and no dishonor, and in the Heel doth strengthen the Motion, and therefore requires no Cure, besides if there be rest, it will peell off, and a new skin succeed.

But if they grow to be an hinderance in touching or going, as Cornes, then we must use Softners.

And chiefly Baths for the Hands and Feet, of warm water, and softning Plants, mentioned in Clysters, that mollifie, and in the Baths for a Scirrhus, with Grease, and fat Tripe-broath, and Oyls.

Also Oyntments, Plaisters of Oyls, Grease, Mucilages and Gums mentioned in Scirrhus, and things that soften a Corn.

Among the which Ammoniacum dissolved in Vinegar is most softning.

After bathing, pare the Hands, Nails and Feet about the Heel, with a Pumex Stone, or File.

We took away a Corn in the side of the Foot, which was very troublesom and hard with our Cautery, that causeth no pain.

The Cure of Scars.

The Cure of Scars or Callus in the skin, is not accounted needful, especially in Soldiers, to whom a wound in the Face is honorable, because it argues they faced their Enemy, and ran not. Also when it comes from any other Cause, if it be even with the skin as a white Lye, it is neglected, because it is like the skin, and must not be altered to another Color, least it be more apparent.

But when it sticks forth, or is uneven, we must make it with cleansing Remedies equal with the skin, such as follow.

The Decoction of wild and Garden Poppy, for a Fomentation.

Also the Water of Lilly, or Bean flowers, and that of Mans dung commended by some.

Also Oyl of Myrrh, and Yolks of Eggs, of bitter Almonds, Peaches, Dates, or instead thereof, beat the Kernels, and rub the part.

The Common People rub it with fasting Spettle.

The Liquor that sweats through Eggs, roasting in the Embers.

The Grease of the Fish Thymalus.

Or an Oyntment of Rocket, and Mustard seed with Ox Gall.

Or of Borax, Camphire, and Grease or Marrow.

Oyl of Nutmegs boiled in Vinegar, and Niter, is commended of *Dioscorides*.

An Oyntment. Take *of the Roots of wild Cowcumber or Dragons, Orris, Reeds, each two drams; Mellon seeds, and Radish roots, each one ounce; Harts Horn, or burnt Egg-shells, each half a dram; white Chalk, Crystal, or Amianeum, one dram and an half, Frankincense, one dram, Sugar Candy three drams, Gum Traganth infused, or the Mucilage, of Fœnugreek, one ounce, with Oyl or Grease;* Make an Oyntment.

If these avail not, use strong Cleansers, Corroders and Burners, if you will take it quite away. Such as we shewed in Discoloration to take away Spots.

You must also pare it with a Pen-knife, as a Callus.

If the Scar be deep like a pit, you cannot make it even, unless you first cut or burn it, and they fill up the Cavity with new flesh, and after heal it.

The Cure of the pits of the small Pox.

But in the pits after the small Pox through the Face and Nose, because

strong

ſtrong things cannot be well applied, there is little hope of Cure, great Men would have ſpared for no coſt, to have it done for their Children if poſſible. If any thing be done, it muſt be ſoftners and attracters, to raiſe the fleſh and make it even. As the Decoction of Lillies, Calfes feet, which will do but little; and this is rather to be prevented in the Cure of the ſmall Pox: as we ſhall mention there.

The Cure of the pitting of the Navel.

The Cure of the pit of the Navel growing too deep is neglected, becauſe being private, it is no Impediment; as alſo that tumor which comes from the growing of it hard; but we ſhall ſhew the cure of the Navel, Rupture and Water-rupture.

The Cure of warts & cornes

Warts and Cornes either depart of themſelves, or are not regarded, when they are not viſible, but when in the Face or Hands, as Warts, or when they cauſe pain, and hinder motion as Cornes, we may cure them eaſier then other hard tumors, though they have deep Roots and be hard; yet being in the Pores, and not faſtned to the true skin, as one with it, nor covered with it as other tumors, and being without feeling, ſo that you may apply what you pleaſe, the Cure is eaſier which we thus order, that they may be conſumed without force or burnt, cut, or drawn out.

We conſume them, either by things proper for the ſame, or ſuch as dry up their Nouriſhment, and make them vaniſh, becauſe theſe are ſo hard, that they can ſcarce be ſoftned or diſcuſſed.

Some Remedies are made of Plants, as the green Leaves bruiſed, of Groundſel, Agrimony, Sumach, Herb Robert, Toad flax, Dandelion, Succory, Beets, Poplar, Rue, Yarrow, Water-creſſes, Aſarum roots, Orris, Teazle, Celandine and Daffodil roots.

Theſe are ſtronger, bruiſed With wine or Vinegar, with Salt or Niter, Pepper or Aloes.

Leeks, Onions, and Lillies roaſted with Greaſe applied are good.

Alſo the Juyces of the Plants aforeſaid, chiefly that of Dandelion like Milk, and the like in Succories, with the Juyce of the Leaves and Flowers of Moulin, Pomegranates and Purſlain, and Laſerpitium.

Honey of Anacardus is excellent alſo.

The Water that comes out of a Vine being burnt.

The Pouder of Nigella ſeed, with Urine, or Lye, or Honey.

Alſo the Seeds of Sun-flowers, being like Warts, is ſaid to cure them, alſo Peaſe meal, and Barley.

Wheat Leaven conſumeth Cornes.

The Aſhes of Willow bark with Vinegar, and the aſhes of Squills is approved.

Frankincenſe, and Pitch poudered, with Salt, Vinegar, and Juyce of Onions like a Plaiſter.

From Living Creatures take theſe, Gudgeons tied to a Corn while they rot, drive them away.

Dioſcorides commends the Head of a Lizard.

The Head of the Fiſh Smaris ſalted, and burnt, and applied with Wax and Vinegar, doth the ſame,

The rough ſcaly skin, alſo in a Hens foot, which is taken off by fire, is ſaid to take away warts, if you rub them or apply them therein.

The Juyce of Cornel-berries alſo is good.

Alſo Dogs dung, Sheeps, and Goats dung, with wax, Soap, Lye, or Urine.

Alſo the Gall of the Ox.

Alſo Sal niter, and Ammoniack, and Allum, with Honey, Suet, or Soap.

Lapis Lazuli alſo poudered and mixed with Vinegar.

We ſomtimes burn Warts and Cornes, and ſo they are rooted out, and return not, this is done by actual or potential Cauteries, you may uſe the ſtrongeſt, if you defend the skin round about.

Crow-foot leaves, and Roots are the gentleſt potential Cautery, yet beaten and often applied, they may conſume them, as alſo other burning Herbs.

Divers Cauſticks work ſtronger before mentioned, which muſt be uſed warily, only to the Wart or Corn, covering the part about with wax or plaiſter, leaving a Hole in the middle.

Theſe are moſt uſual, the Milk that comes from Figs, or their green Leaves, and of Spurge, the Spurge, Mirſinites hath the beſt Milk, and it is to be had in winter; alſo the Milk of Lathyris, Peplus, and Chamæſyce, which are all ſeveral ſorts of Spurge.

Ægyptiacum the Oyntment mixed with Juyce of ſpurge, or Ruſt of Braſs poudered with the ſame, with a little Sublimate, or Orpiment is excellent.

Unſlaked Lime alſo with Soap, and Vitriol, and Verdegreece, or with Arſenick, or Sublimate.

The cautery which cauſeth no pain, made of Quick-lime in a Lye, and ſuch as are mentioned for to open Impoſthumes, do it quickly.

Alſo cantharides with Leaven.

Alſo if it be touched with a drop of Aqua fortis, let it be black.

Or with Water and Vitriol, Arſenick &c. mentioned for opening Impoſthumes.

Or this: Take *Sal Ammoniack, Allum, and Vitriol, each two ounces; Quick-lime one ounce, Verdegreece half an ounce, diſtil them, it is ſtronger with Sublimate and Arſenick.*

Paracelſus commends this for taking off warts and cornes. Take *of Oyl of Juniper berries, Benzonna,* (which is that Muſh-room that kills Flies) *Agarick, each one dram; Ox gall:* make an Oyntment, to be uſed often.

I would rather uſe thoſe little Muſh-rooms, that are full of Juyce, and grow upon Dunghills, gathered before Sunriſing, which I have uſed to Horſes ſucceſsfully for the ſame.

We alſo actually burn them, with an Iron and a Quill to defend the parts about.

Or we fire a Birch twig, and blow it out, and then burn the wart with the the coal.

Or we drop a wax candle thereupon, or burn them with a Match, defending the part with a Plaiſter, or thin Plate of Lead, with a Hole in the middle, when it is done.

Or thus, we boar half a Nut-ſhell as wide as the wart, and put the wart therein, and then lay Brimſtone upon the wart, and ſet it on fire, till the parts adjacent begin to feel it, and then give over.

We cut them diverwayes, or ſcariſie them, to make the Remedies applied ſooner, and better prevail.

Or we cut off their tops with a ſharp Raſor, and ſo go on, till the pain will no longer permit, and then the Medicines will eaſily take away the remainder, or when we are at the quick, we burn it with ſtrong Dryers, or apply a Plate of Lead hard bound.

If they hang down, they muſt be tied with ſilk very hard to hinder their Nouriſhment, that they may fall off.

Warts are ſuddenly drawn out by the Roots, by Art by Mountabanks with their Nails, or an Inſtrument, which they firſt anoint with an Oyntment, which they proclaime good for divers Diſeaſes to deceive the people.

Some things are thought to cure warts by a ſecret Propriety; as wart-ſuccory uſed in Sallets, or Horſe-time.

Alſo the Seeds of Wart-ſuccory one dram taken before ſleep, for ſome dayes together.

If you take ſo many Peaſe as there are warts, and touch every wart therewith, and then wrap them in a clout, and throw them behind you in the new Moon, thus *Dioſcorides:* the vulgar uſe to burn them.

The Cure of Pimples in the Face.

Pimples in the Face and Head, called *Vari* or *Jonthi* and *Pſydracie*, muſt be cured with ſtrong Cleanſers, Softners, and with Corroders and Cauſticks, all which we have ſhewed in ſtubborn Spots and Morphew in Diſcoloration: as alſo how the Body is to be prepared and purged.

Theſe following diſſolve Pimples, Gooſe greaſe, Wolf or Cats greaſe, and that of the Fiſh Thymalus.

Alſo

Alſo the Greaſe that comes out of a burnt Linnen-ragg.

And Aloes, with Gum of Fennel, and Vinegar of Squills.

Or, Take *the Juyce of Docks four ounces, Vinegar of Squils one ounce, Gum Ammoniack diſſolved in Vinegar, half an ounce, Borax three drams, Salt and Allum one dram.*

This is excellent: Take *Juyce of Onions, Leeks, and Scabious, each half an ounce; ſoft Soap one ounce, Gum Ammoniack diſſolved in Vinegar, two drams, Myrrh, and Aloes, each half a dram; Powder of Penny-royal, Hyſop, and Baſil ſeed, each one ſcruple; Salt, Niter, or Allum one dram, Borax half a dram, burnt Vitriol one ſcruple*: make a Liniment.

Or, Take *Dock roots, and Elicampane ſliced*, boyl them *in Vinegar*, and bruiſe them, adding *Borax, Aloes, Frankincenſe, Cuttle-bone*, or ſtronger things.

Or, Take *Penny-royal, Hyſop, or Agnus Caſtus dried, each one dram; Meal of Lupines, or Orobus two drams, Salt, or Juyces before mentioned, or Borax one dram and an half, Frankincenſe half a dram, with Oyl of Muſtard*, make an Oyntment.

Or, Take *the Meal of Lupines two ounces, of Orobus, or Vetches one ounce, Melon ſeeds peel'd two drams, Raddiſh ſeed one dram, Orris roots two drams, Sal Ammoniack one dram, burnt Harts horn half a dram*: mix them with the Infuſion *of Gum Traganth, for Troches to be diſſolved in Milk.*

Oyntments of Fiſh gall and Oyl, Honey, and Sugar doth diſcuſs Pimples.

If theſe in the Head are mattery, you muſt add Lytharge with Vinegar, and Verdegreeſe, and other Dryers, mentioned in the Scab.

The laſt Remedy for hard Pimples, are the corroding and cauſtick Medicines mentioned in Spots.

The Cure of the Tumor in the Eyes, called Hordeolum & grando.

Hordeolum is a hard tumor like a Barley corn upon the Eye-brows, beneath, and Grando like Hail, is the ſame above in the upper Eye-brow, and they are cured as warts, by applying things which conſume them, but ſo that they may touch only them, and not get into the Eye, and hurt it, eſpecially when they are ſtrong.

Theſe following are good in theſe tumors, Gum Ammoniack, or Serapinum ſpread upon Leather.

Alſo Flies their wings taken off, and Ants mixed with Roſin and Wax.

Wine Lyes, Vitriol, Honey and Wax.

Lime with the third part of Vitriol, and Turpentine.

If nothing will prevail, we may burn them off, defending the Eye carefully, as in warts, whether we do it by actual or potential Cautery.

We may alſo ſcarifie them; but it is not ſafe to cut them off, or forcebly to pull them out.

We may, if it be convenient, tye them with ſilk like warts, but gently, leaſt it through pain, ſhould cauſe Inflammation.

The Cure of the Tumor of the Breaſts with Milk.

The Cure of the Swelling of the Breaſts from Milk, becauſe it goes of it ſelf, is ſeldom undertaken. But if it be ſuch as it cauſeth fear of Inflammation, then we muſt have a care to hinder the comming of Milk into the Breaſts, and to conſume that which is there, or draw it forth.

But if it be curdled, and the tumor hard, we muſt diſcuſs it, if it tend to an Impoſthume, we muſt ripen, open it, and cure it as an Ulcer. And if Inflammation follow, it muſt be cured as a Phlegmon: of which we ſpake in the treatiſe of Pain.

We hinder the increaſe of Milk, with a ſlender Diet, Evacuations by bleeding and purging, and giving things that conſume both it and the Seed, as Agnus caſtus, and Rue ſeeds, we keep it from the Breaſts, by revelling and deriving the Blood another way, as by opening a Vein in the Arm or Foot, (eſpecially if they were not well cleanſed after Child-bearing) and with other things that provoke the Courſes, Scarification, Cupping on the Shoulder, and above the Knee, by Frictions and the like.

Alſo by binding the Breaſts, and uſing Emollients, you may hinder the farther increaſe, and conſume the Milk in the Breaſts. The Engliſh and French Women, which uſe not to nurſe their own Children, apply bags of Lin-ſeeds to their Breaſts, and bind them down, for the ſame end.

We repel the blood by outward Applications, which we place upon the viſible veins, that come from the Arm-pits to the Breaſts, not upon the Breaſts, but about, and without them, becauſe if Milk be curdled in them, it cannot be repelled.

There are alſo repelling Emplaſters called defenſatives, made of Bole, mentioned in Phlegmon, and in the Pains of the Eyes from Deſtuxion, uſed to the Fore-head and Temples and the like, elſewhere mentioned, which muſt be laid about (not upon the breaſts) but towards the Arm-pits.

Eſpecially thoſe we mentioned for hindring the growth of Breaſts, may alſo be good to hinder Milk.

Alſo an Epithem of Vinegar, Roſe-water, and Allum, with a little Camphire to penetrate rather then cool.

We diſſolve Milk in the Breaſts with Dryers and Digeſters laid all over upon the breaſts, and if there be a tumor, you muſt lay thereon things that conſume Milk, and bring it to matter.

Mints is chiefly good for this, and next Calamints, Smallage, Coriander, Agnus caſtus, alſo Wormwood, Horehound, Ladies-glove, Palma Chriſti, Epimedium, Rue, Rocket, Celandine, Cole-wort, white Beets, Briony Leaves, and water Lilly roots beaten green, or boiled firſt in Wine and Vinegar equal parts, and the third part Honey to a Cataplaſm.

Or that which is made of Wheat-bread, or Bran, Bean, Barley, Lentils, Orobus, and Fœnugreek meal boyled as before, ſomtimes with Herbs, and Oyls of Dill, Chamomil, and Lillies.

As for Example. Take *Marſh-mallow, and Lilly roots, each two ounces; Mints two handfuls, Wormwood, and Celandine, each one handful; Chamomil flowers one pugil*, boyl them *in Wine, Vinegar, and Honey*, as before, beat them up *with Bean, and Barley meal, or the like four ounces, Oyl of Dill, Ducks greaſe, each two ounces*; make a Cataplaſm.

Or thus: Take *Bean and Lentil meal, each four ounces*; boyl them *in Vinegar, and the third part of Honey, with dry Mints, half an ounce, dry Wormwood two drams, Cummin ſeed half an ounce, Agnus Caſtus ſeeds, and Chamomil flowers, each two drams and an half; Liquid Storax half an ounce, Saffron one ſcruple, Oyl of Dill two ounces and an half*; make a cataplaſm: to this add *of the Runnet of a Kid ſix drams*, to diſſolve Milk if it be curdled.

Another, mix Bread with Purſlain, and Sage-water, and Honey for a Cataplaſm.

Some only ſteep Bread long in Mint, Sage or Purſlain-water, and apply it.

The Root of the greater celandine, beaten and laid upon the Nipple, is ſaid to diſſolve curdled Milk.

Dioſcorides teacheth that Hemlock doth deſtroy Milk, and hinder the growth of Breaſts, and other Stupefactives, alſo not by cooling, but by diſcuſſing, as we have ſhewed their Nature to be.

Oyntments made of the Juyces of the Herbs mentioned with Oyls, as of Mints and the like, do conſume Milk, and diſſolve it when curdled, as this: Take *the Juyce of Smallage, and Mints, each two ounces; Vinegar one ounce and an half, Honey two ounces*: boyl them a little. and waſh therewith.

Dioſcorides commends wine Lyes, with Vinegar.

Alſo a Fomentation of the Herbs aforeſaid, with a ſponge or Linnen-cloath is good, eſpecially a Decoction of cummin and coriander.

Or with ſtrong Vinegar, Sack boiled with a little Saffron.

We take away abundance of Milk by the way ordained, by the Infants ſucking, and if it will not move, Children muſt ſuck, or let a woman draw them with her mouth or with an Inſtrument for the purpoſe. If this cannot be done

done for want of Nipples, you must do what is taught in the Loss of Nipples, and want of Milk.

The Cure of Tumors comming from Blood, is first of the Veins, as of Varix, or swollen Veins, Cirsocele or Codrupture; and secondly of the Arteries, as an Aneurism.

The Cure of a swollen Belly in women with Conception.

As to the other Tumors of the belly, comming from the Terms stopped, as if they were with Child, without Conception: because it ends with a large Flux of Blood at the womb, we shall speak of it, in things cast off, when we mention bleeding at the Womb.

The Cure of Varix or a swollen, and crooked Vein.

If Women with Child have great Stretcht, and crooked Veins in their Legs, after they are delivered, they commonly vanish. And if either Man or Woman have them continually, they regard them not, till they trouble them. But if they itch or pain them, or turn to an Ulcer, they must be cured, because while they continue, the Ulcer cannot be cured, as we shewed in the Kind of Ulcer.

For the Cure, first consider the Plethory, and evil Habit or Juyce in the blood, and this must first be cured by letting blood, and purging: as we shewed.

Then we must apply things that may repress, and consume the filthy blood that stretcheth the Veins. And that with Lotions or Fomentations, with a Decoction made in Forge-water, or Lye or Urin, of Fennel roots, Buglos the great, Agrimony, Laurel, Cole worts, of Rosemary, Elder, and Lavender flowers, Cypress nuts, Sloes, Lupine seeds, Cole-wort seed, with Salt and Allum, and if you will astringe more, with Vitriol.

Or with this Fomentation, or Epithem. Take *burnt Chalk three ounces, Bole, or fat Earth one ounce and an half, Acacia, or dryed Sloes one ounce, Sanguis Draconis six drams, Myrrh half an ounce, strong Vinegar one pint and an half, Lye three pounds, with a little Salt and Vitriol* we stop the flux, by Ligatures, or Roulers about the part, beginning from below upwards, as we shewed in Oedema, alone, or with a Fomentation afore, or we wet the Rouler in the Fomentation, and strain, which will be stronger thereby, especially if it be made of Sloes.

Somtimes we cut off the great Vein, which nourisheth the Ulcer, when it hinders the Cure of the Ulcer; if there were no Ulcer, we would not do it, because dangerous if but opened. It is better therefore to bleed in the other Leg for Revulsion. But when we will cut a Vein out that nourisheth the Ulcer, first you must mark its Passage above with a Pen, as it comes from the Ulcer, and then open the skin by longitude, and lay the Vein bare, then rub the Blood down, and tye the Vein above, and cut it beneath in length to let out the blood, then bind it next to the Ulcer, and cut it that part of the Vein, which is between the two Ligatures, and so the way will be stopped, by which the Ulcer was fed.

The small crooked Veins in the Codds, Privities of women, and Eye-brows, or in other parts of the skin, because they hinder not, are not regarded, but if you will do any thing, you must revel the blood from the part, and repel and discuss it, as in Inflammations, only your astringents must not here be so cold, least the Blood congeal.

The Cure of the Stone vessel rupture.

Cirsocele is when the spermatick vessels are swollen, and if it hinder not the Seed, it is not regarded, because it is hard to be taken without Gelding, and except it grow great, like a flesh Rupture, it is not attempted, but you must use Fomentations and the like, before it comes to that.

The Cure of Aneurisma.

Aneurisma, that is a Tumor from the opening of the artery, when the blood thereof gets under the skin, when it is old is not curable, because the blood cannot be repelled by astringents, or the mouth of the Artery lying deep be shut. Nor may we open it, because the Patient would certainly die of a Flux of Blood, which cannot be stopped. Therefore if at the first Repellers and Closers of the Artery mentioned in Hæmorragy or Bleeding do nothing, we must leave it, except we will use a Ligature, or Plate of Lead, to keep it down.

As for an internal Aneurism, because it hath no external Tumor, of which we spake, but produceth the Heart beating, we have shewed how it must be ordered, when we treated of Palpitation of Heart and Cachexy.

Tumors comming from Seed, as that which is Natural of the Belly in Women with Child, require nothing but good Government, to prevent Abortion or Miscarriage, as shall be shewed in the Treatise of unseasonable Births.

The Cure of the Belly swollen with a Mole.

The tumors of a Womans Belly from a Mole, is to be mentioned in things cast off, because the cause is not to be certainly known, till the Mole is brought forth.

The Cure of tumors that are from the Birth.

The Cure of particular Tumors, is not here to be repeated, if they come from the Seed, at the Birth, as Sarcomata, Kernels, Struma's and the like, because they are to be cured as those.

CHAP. IV.

Of Defœdation or Defilement.

The Kinds.

UNder the Name of Defœdation, we understand those Infections which defile the Body with many Diseases. so that they are that infected with them, must leave the society of sound Men. Of this there are two Kinds principally, The one is old, called *Lues Elephantica* or Leprosie, the other new called the *Lues Venerea* or French Pox. The body is many waies defiled by them, with such as are common to both, as tumors, pustles, ulcers and falling of the Hair, and others that are proper to them in particular Pains, and Hindrance of Functions.

There are also other Infections, that have been first known our age, that defile the Body, and are proper to some Countreys, among which the Scurvey is most known, usual in the *North*, of which we shall speak here, leaving other Infections to them that know them.

The Leprosie called Elephantiasis.

It is called *Elephantiasis*, from the Likeness of the Patient to an Elephant, his Ears growing thin and broad like wings; they are called Lepers, from the Roughness of their skin, and from their Lyon like looks, it is called *Leontiasis*, and because they are Lecherous *Satyriasis*.

In this there are divers accidents, which are to be searched and described, because they shew how it came, and they who have it, are to be examined by the command of the Magistrate, and separated from the sound, that we may judg rightly, and not mistake as usually, and offend either sick or sound. In regard I have been thirty years appointed, and have examined above six hundered suspected of the same, I will faithfully declare, first the Diseases they have, and then the Actions hurt, and examine the things cast off, that we may know how to judg of the same.

The outward Infirmities, are chiefly in the Heads and Joynts, and the Searchers do scarce examine any other part, and yet give sure Judgment. In the Joynts they examine the Hands; and Feet, Fingers, and Toes and Nails, and above the Knees to the Thighs, above the Elbow to the Shoulder; and in the Head they search the Mouth, Eyes, Nose, inside and outside, Face, Ears and Hair, Eye-brows, and Beard, and the tumors and ulcers there, to judg by them alone, or together.

There are oftentimes little tumors in the Leprous upon the

the Face, and Joynts; in the Face, upon the Fore-head and Cheeks; and making them look wildly, which first discover the Disease, and are in the Arms, Backs of the Hands, and in the Feet and Thighs. These are moveable, and without pain, and are blewish, red, especially in the Face. like a cancerous Tumor. These Pustles be they in one or more places, fewer or more, do certainly declare an Elephantiasis; and if these appear not, you cannot judg directly, except other signs concur.

A general Cancer.

There are other Tumors, which are in the Mouth, the Palat and Jaws, more or fewer, yellow, blew, which are signs of the same; such as are in Hogs, and therefore in *Germany* they look in their Mouths, and if they find them, they will not eat of their flesh.

There are also Ulcers, especially between the Toes, and in the Soles of the Feet, in the thick skin there, and in the Hands, also in the Elbow, and other Joynts. These Ulcers pierce through the skin, and seldom go farther, but are broad, with hard, swollen Lips easily bleeding, like Carcinomata; and because the tumor is like a Cancer, and the Ulcer resembleth a cancerous Ulcer. This Elephantiasis is called an universal Cancer. Neither do the Ulcers feel any pain, nor the Tumor though they be molested; hence they are supposed to be void of feeling: besides these Ulcers creep, and being cured in one place, they break forth in another. From these alone rightly understood, we may determine the Leprosie, but surer, when the other agree. They who are infected, pretend they were burnt to take away suspicion, because they resemble the Scars of burnings. Experience shews that the Ulcers and Tumors in a Leprosie, want feeling. So *November* 22. 1625. a young Man of three and twenty years of age, being to be searched for a Leper, who was full of such tumors and Leprous Ulcers and signs, and therefore judged to be a Leper, I being brought in with many other Physitians, (by my Father of pious Memory) to give censure, thrust a Needle into a Tumor on the outside of the right Arm, being high to the bottom, in the presence of them all, and the Patient being blind-fold, perceived it not.

There are Ulcers in the Nostrils, and they are worst which eate the spungy Bones thereof, and make the Nose fall off, and corrode on further, and eat through the Palat and Uvula, and the Jaws, and if they get down to the Wind-pipe do kill the Patient, as also when they are too corroding in the Nose.

Somtimes the Swelling of some parts declare the Leprosie, as the broad Grisle of the Ear growing thick, swollen or broad, as an Elephants, from whence it is called *Elephantiasis*. Also the Nostrils are dilated, which makes the Face very uncomely, especially when the Nose between them is flat, which also hinders breathing; also the other parts of the Face swell besides the tumors: as also the eye-brows, so that the red hangs out, and seems horridly. Also the Hands, and Feet are swollen, when the rest of the Body is lean.

If a skin be grown over the Eye, it is an Argument of the Leprosie, if other signs agree. And if it be in the larger corner grown thick, it gets over the Pupilla, and hinders the sight, as we shewed in the Hurt of sight.

Sometimes the skin of the Leper is rough in the Feet, Hands, Face and Ears, and also in the Head, and Eyebrows where are also Dandrough and Scabs, somewhile blew, or black, with little, or no itching. The skin is also cleft in some places, especially the Hands, and it is hard and scirrhous, the Nails are also cleft and bent; there is also a Scab dry and stinking, over the whol Body, which seems to pollute the whol Body more then an Elephantiasis, which is only in the Head and Joynts, and that called *Psora*, by the Greeks, is most desperate and taken for Elephantiasis; as we shewed in *Psora*, but being not the same, it must be distinguished. And the Greek Leprosie is not to be called the Arabian Leprosie, which is the Elephantiasis, except other more certain signs accompany it.

Also the hair falls off both from the Head which is bald, as also the Chin, so that the Beard is either fallen or very thin, and from the Eye-brows.

The strange colour may help the Discovery of this Disease which is not fresh, but pale, yellow, black and dark, especially the Face, and the Eyes are red or blew. Also if Veins under the Tongue are black and swollen; but this sign I have little regarded.

The Functions are not hurt at the first, wherefore they feeling no pain neglect their cure, till more manifest signs appear: And then they have defect in the Operations by the Increase of the Distempers mentioned, especially in breathing which is hindered by the stoppage of the Nose, so that they breath with open Mouth, and by Ulcers and Tumors in the Nose, so that their Voice is hoarse, and the Party grows in danger of being choaked, and so they many times die, when notwithstanding other accidents, they might live.

Also the Senses are hurt in the continuance of the Disease, as the sight with a filme in the Eye, which either hinders sight, or makes blind. Also the touching is so stupified, that the skin feels not any offense in the part, and therefore they try them, chiefly by the prick of a Needle. But Experience sheweth that is not alwaies true, but only in the swollen Feet, which have long been so, and want Heat to be felt as if dead, this I have tried by pricking them to the bottom, neither did they bleed, but onely water. And this made them think that in all Leprosies there is want of feeling, or it was because the ulcers and tumors are without feeling: as we shewed, therefore they suppose all the Body insensible.

As for other Functions, except by the continuance of the Diseases the strength fail, they can perform any actions, as eat, concoct, digest as sound Men, and if poor, they beg for Meat. Moreover, lust is not gone from them, because by many instances, they are proved wanton, and though they impute it to other causes, yet we suppose it to be from their being kept from their Wives. And they can procreate, as appears by their Wives left with Child, though they were Leprous long before, and also they beget leprous Children.

There is nothing voided which doth especially declare this Disease, though many Chyrurgions and Physitians say they may be known only by their blood, which the People beleeves, and therefore they bleed all they examine, and pronounce by the blood, as it is black, blew, or gravelly. Others strain it, and seek for worms, which they say is the true sign; others try the blood, thus they throw hot Salt into the blood, and if it dissolve not, or if Vinegar mix not with it, it is a true sign of the Leprosie. But we that have above thirty years, diligently searched into the Blood of Lepers, do plainly declare that neither we, nor our Chyrurgions could ever find any sign of Leprosie from the blood, but it was either like sound Men, or not much different corrupted or infected, or so bad as in a Feaver or Jaundies. And we declare the same concerning Urin, which the vulgar esteem so much of for discovery, as also of the Pulse, which hath no Alteration.

The Venereal Disease called by that name, because it comes from Venery, and because it is there frequent, and came from thence the Neapolitan Disease, or French Disease may be more truely called the Indian Disease, thence it came first, doth corrupt the body with as many accidents as the Elephantiasis, and makes it filthy, sick and uncomely. And in this there is great pain, and if it be alone, it is referred to the pains about the bones; but if it be mixed with other accidents, it is to be referred hither. And these accidents are to be diligently searched into, because it is infectious, and that it being known betimes, the unsound may be separated from the sound, for which end there are proper Hospitals. These accidents following are the chief.

The French Pox.

The Hair usually falls off in the French Pox, which is a sign, especially about the

One kind of French Pox.

Temples, Forehead and Eye-brows; and in men the beard falls, and this is a more certain sign, if other accidents concur, albeit if there be no sign of another Disease, it will be a sign of the Pox alone; and also if they confess that they have had to do with unclean Women.

Another kind of French Pox.

The skin is sometimes sprinkled with small Spots, red and like Fleabits, or Freckles, dark, yellow, or blew in many places, in the Face, Neck, Breast, Belly, Privities, sometimes all over. And we have sometimes seen these Spots so joyned together, that the skin hath been broadly infected, especially in the Breast and Back, and sometimes in the Belly, or other places, which being pressed the strange colour flew away, and the pit was white, and presently returned to its former colour. These Spots either alone, if we can discover no other cause thereof, besides unclean Copulation, declare the beginning of the Pox, or some small kind of it, as also the falling off of the Hair alone; or with other accidents they will be more certain, and shew the Disease to be worse.

The third kind of french Pox.

High Pustles without pain, are sometimes in the skin, reddish, or yellowish, round, hard, and covered with a dry Scurfe in the Forehead, Ears, Nostrils, Jaws, and in the Head; also in the Neck, Breast, Arms, and other parts: and these certainly declare the Pox.

Besides, there are divers malignant Pustles in the inward parts, the Mouth, Jaws, Nostrils and Præpuce, or Foreskin of a mans Yard, and Womens Privities; these if many together, do certainly signifie the Pox, especially if other signs went before, or come after. In Children infected, these Pustles in the Mouth, are the chiefl sign of it.

There come also filthy Ulcers from the Pustles mentioned in divers parts, yet chiefly in the tender parts of the skin, Face, Nose, Lips, and about the Privities, and that cancer in the Præpuce or Fore-skin of the Yard, and those in womens Privities, also in the Jawes, Mouth (as the little sores called *Aphthæ*, or thrush) Nostrils, and in the Posteriors.

Some of these creep on, and corrode the subject parts, and corrupt the bone, and bring hurt to the parts, either by Lameness or loss of the same. Others disfigure the Face by eating off the Nose; others corrode the Lips, so that they cannot drink, or sup, which must be done by the lips, as I have seen. Others have eaten through the Palate, and consumed the Vvula, whereby the voice hath been hoarse, and they have spoken through the Nose, and snuffled. Also these Ulcers corrupt the Glans, Nut or Head of the Yard, and makes them unfit for Venery: as we shewed in corroding Ulcers, such as hinder Functions and Actions. By these, especially if many together, and mix'd with other accidents, we certainly discover the French Pox.

The fourth kind of the French Pox.

Pains about the Bones without flesh, as in the Shins, Shoulders, Head, Fore-head, and Temples, sometimes in the Breast, which is only pained in this Disease. These pains are great, and worst towards night, and when they are touched, neither will they be asswaged with Anodines or Stupefactives as other parts, but worse thereby. These if without other signs, are to be referred to the pains in the Habit of the Body. And if they be joyned with other accidents, they make a distinct Pox from the rest, and it is easily known.

Besides these, there are other accidents which are signs of the Pox, which being alone, (because they may be also in other Diseases,) cannot determine certainly, except after copulation with unclean Women, they cause a suspicion. And then also we cannot undoubtedly pronounce it the Pox, except there be other signs, for before ever the pox was known, there were venereal Buboes or Swellings in the Groin, without Infection, that came by Copulation; and other accidents which we shall explain. And if they come from the Pox, there will presently be other signs, as pain about the Bones, falling of Hair, Spots or Pustles. These following accidents, are both in the Pox, and in other diseases, and are exactly described elsewhere, therefore we shall but touch upon them here.

The Swelling in the Groin called *Bubo venereus*, sometimes breaks forth in the beginning, and vanisheth presently, or if it remain, it grows hard, or comes to matter, nor is it unlike that Bubo which is without the Pox.

These are Swellings called *Condylomata* in the Privities of a Woman and of a Man also, which are also like those that are without Infection.

There are clifts also in the Hands and Feet, and the skin in the Palm of the Hand, being thick, comes off without pain, as we shewed it may without the Pox.

It is observed that the Nails and Hair also fall off.

Sometimes there are Nodes or Knots in that kind of pox, which is about the bones with pain, in the Forehead, Shins and other parts without flesh; as we shewed in pains about the Bones, which are without the Pox, and yet very like it.

Sometimes there is matter that flow from the Privities, both of Man and Woman, fouling their Linnen with a yellowish stain, which follows a venemous Matter or Seed, mentioned in the infectious or virulent Gonorrhœa, or running of the Reins, this is joyned with the Pox, and is sometimes without it.

There is also here a burning of Urine with dropping of the same, as in other Diseases. As for the other accidents that hinder Actions, because they come not of themselves from this Disease, but by accident from other Causes and Diseases, if they grow troublesom, being general, and belonging to other Diseases of continuance, and do not constitute the Pox, neither can we take any certain signs thereof from them, we willingly pass them by. As we counted it also to be superfluous to predict or foretel any thing hereof by the Urin or Blood being contrary to experience; and we think it fit to cherish the people in their Folly of supposing all things may be known by urin.

The Scurvey.

The Scurvey is called by *Pliny* and *Strabo*, *Stomacace*, because it is in the Mouth and *Scalurbe*, because it is in the Shins with spots, and *Scorbeck* or *Schuerbuych* in High Dutch. This being first found in the Northern Sea-coasts and infectious, makes me suspect that it was brought by the Sea-men from some remote part, as the French Pox was brought first into *Naples* being near the Sea from the *Indies*, and called first the Indian Pox; not unlike that which comes without Infections, for both infirm the Body, and hinder Action: as shall be shewed.

These have Spots in their Thighs, first small, then lying hid, of a purple or violet colour or black; others have black or blew skins all over, and sometimes in other parts, sometimes these Spots wear away with the skin like scales, sometimes they vanish suddenly afore death, and after death they appear again.

Their Gums are swollen and loose, Itch, and are painful, and sometimes bloody. Also the Legs swell, or grow very small, with small Pustles, which are hard in the Kernel parts of the Body, and between the Muscles, and in other parts, sometimes without pain, like those Tumors in the Glandles, and cause that Infection which is called by the French *Scrophula*, of which we have spoken.

Afterwards the Gums ulcerate and stink which infecteth the Breath, and when they are consumed, the Roots of the Teeth lie bare, and they are loose, as in the Cancer of the Gums, mentioned in the pains of the Mouth, where we mentioned the Scurvey of the Gums. There are Ulcers in the Shins, but seldom, these are putrid or stinking, and rotten, or gangrenous, and without feeling.

There is also a stretching, or a contraction, or a roughness in the Legs about the Calfes, which comes at the first with little pain, and pricking about the soles of the Feet, which keeps them from standing or going: and sometimes the Veins of the Legs swell, and are crooked.

There is also Heavines and Lazines of Body at first, and the Pulse is weak, then there follows such a Weakness and

Straigthness

Straightneſs of Breaſt, that when he would ariſe and move he fainteth, and the Pulſe ſtops.

As for other ſigns, there is loſs of Appetite, or Increaſe in ſome. The Belly is bound in ſome, and looſe in others, the Urin red and thick, and the Sweat ſtinketh.

A gentle Feaver accompany's it, or an acute or ſharp malignant Feaver goes before it, ſometimes a quartan follows, and then the Pox returns after it, and brings worſe Diſeaſes, as Convulſions, Palſies and the like, in which it concludeth, as Atrophy, or want of nouriſhing, Conſumption, Dropſie, and bloody Flux &c.

The Cauſes.

We refer the Cauſes of theſe Infections which ſo diſturb the Body, whether it be the old Leproſie or latter Pox, or the Scurvey only known in ſome Motions and the like, not to a certain and manifeſt Quality, or Humor, or to Venom which lie by its Malignity, as appears by the Effect doth act ſecretly and deadly deſtructive. But we ſhall ſhew what parts of the Body they invade, and what Diſeaſes they produce therein, and from what Cauſe, in theſe ſeveral kinds following.

The Part affected in Elephantiaſis.

The Diſtemper comming from the Leproſie called *Elephantiaſis*, ſhews that only the Membranes are infected, and chiefly the skin, and ſome places thereof, eſpecially in which this Infection produceth the accidents mentioned, as little Tumors in the Face, and in the Hands and Feet, Ulcers in the skin of the Feet, Soles thereof, and between the Toes, the Swelling of the skin, in the Noſtrils, and Ears, and of the Face and other parts, and ſomtimes Roughneſs and Clefts in the ſame, and in the Nails, and the falling of the Hair: alſo the ſame Venom breeds Puſtles in the Palate, and Ulcers in the Tunicle or Skin of the Mouth, Jawes and Noſtrils, and thickneſs in the skin of the Eye, and at length a film. But in other parts, as the Muſcles, Bones, inward Bowels, and Veſſels, this poyſon cannot do the ſame, as is vulgarly thought, as appears by their having no other Diſeaſe that pierced ſo deep, when they are opened, and in regard no Functions are hurt, either in the voluntary Motion, or animal, vital or natural Actions, except there come another Diſeaſe, neither doth Urin, Blood, or other Excrements ſhew any Infection of the Bowels, as we ſhewed.

A venemous Diſtemper is the cauſe of Elephantiaſis.

The Diſeaſe which this Venom produceth, muſt alſo be a venemous Quality or Diſtemper in the skin, not only perverting the true temper thereof, but corrupting the whol ſubſtance, ſo that it converteth the Juyce with which it is nouriſhed, and ſupplyed when it is worn away, (although it be made from good Blood fit to nouriſh ſound parts) into the like evil ſubſtance, when it comes to it. Even as we ſhewed another venemous Quality produced a Cancer, and that evil Juyce nouriſhed and increaſed it. For as from this, a tumor only in one place, ſo from that are divers Puſtles and other Diſtempers. Therefore becauſe Elephantiaſis, and a general Cancer come from a like venemous Cauſe, producing divers Operations, that Elephantiaſis may be called a general Cancer, rather then that which infecteth the whol Body, becauſe it is not all over but in the skin, and ſome Tunicles.

The Cauſe from which this poyſon producing an evill Quality in the skin and tunicles, which is the ground of the Leproſie is divers.

Somtimes it comes from the Parents that were infected; ſomtimes from other Humors, or Cauſes in the Body. When this Venom comes from the Seed of the Parents, it cauſeth an hereditary Elephantiaſis, for Seed comming from the whol body, that which comes from the parts infected, is polluted, and when the Child is formed, the Venom makes an Impreſſion in the parts like thoſe from whence it came, as the skin and tunicle which it produceth. And it ſeldom appears preſently after the Child is born, but being tamed and qualified by the ſtrength of the purer part of Seed, it lieth hid ſomtimes, and is only in power, till that growing weak, this prevalent Venom breaks forth, into Act, ſomtimes ſooner, and then it is greater, and ſomtimes later, and then it is leſs, and ſhews it ſelf at that time of age, wherein it appeared firſt in the Parents. And it happens that lying hid in Children a long time it appears, ſometimes in their Children before it appears in them, ſo that the Children are free, and the Grand children infected. And though there be no certain ſign of it in the Parents, yet it may be derived to the Children, and be firſt manifeſt in them. As in a certain old Man that had no ſigns of a Leproſie, who had one Baſtard and two Legitimate Sons, which in their Youth were wonderfully infected, and yet three Daughters begotten by the ſame Man were free from it all their lives: this we ſaw. And it was credible from the polluted Seed of the Father, not yet appearing in him, upon the Sons; and the Daughters eſcaped by the purity of the Seed of the Mother. Although God ſometimes inflicts this as a Puniſhment with that means.

It is a received Opinion that one Body will infect another, and therefore they are ſeparated one from the other, and it appears to be ſo, becauſe the Infection being in the external parts and skin only, nay by touching or lying together, eſpecially in Mariage, may eaſily be conveighed to the skin of another; or by the uſe of the ſame Cups or Spoons, or taking in of meat, which the infected have chewed, it may get firſt into the Mouth, and then into other parts. As we ſhewed the venom of the Pox, and of beaſts, could infect by ſpettle. And they are ſooneſt infected that are of a like temper, as thoſe of a Kindred, as we have upon ſearch found two or three Brethren infected in the ſame Family. Or they have ſome capacity to receive it, which we can ſcarce declare; but it is ſuch, becauſe when many have been together in the ſame danger, onely one or two have been infected

Alſo they ſay that other Creatures infected therewith, may infect Man-kind; for although Beaſts have ſomwhat like the Leproſie, as tumors in the Jawes in Hogs, yet becauſe it is not every way the ſame, neither have they other ſigns of it, as men have, it is either not the Leproſie, or another kind, and will infect only beaſts of their own kind and not men. Alſo we daily find by Experience, that poor people eat daily meazled Hogs, and yet have no ſigns of Leproſie.

I have obſerved that a Woman with Child that longed for meazled Pork and eat much of it, brought forth a Son who had meazly Puſtles all along his Back-bone, very like thoſe of Swine ſpread abroad, continuing a while and then vaniſhing without any other inconvenience. We ſhall affirm little, but leave it to every Mans Experience, whether from the biting or ſtinging of venemous beaſts, or touching only of Venom, or drinking or ſmelling, as they ſay of baſil, this Leproſie can come or not, although the people have divers Opinions thereof.

It appears this Infection may come from Humors very often, becauſe many Leprous Perſons have not taken it by Infection, and we ſee often them that have converſed long with Lepers, and been married to them, to have remained ſound. Therefore becauſe we cannot perceive any other Cauſe from whence it ſhould ariſe, we conclude that it comes from within. Moreover we cannot ſay that theſe Humors from whence the venemous Quality comes into the parts, ariſe from Diſtemper or Corruption, as is generally beleeved, becauſe they produce no other Diſeaſes or accidents, or ſigns of the ſame, which uſe to ariſe from the change of Humors in that manner: but that a certain venemous Quality produceth a Diſeaſe like it ſelf. And this may be bred in the Blood, and with that property by which it can onely hurt ſome places, according to the Nature of

poyſon,

poyſon, it hurts only the skin and Tunicles only and no other part. For the doing of which, and that its force may come to the Superficies of the Body, it is not needful that all the blood be corrupted, for then it would kill the Party, but ſome part thereof. Or if this poyſon being againſt Nature, be driven to the exteriour parts by it, the Cauſe with its Effect produced will ſtick there, only where the Infection brake forth, and no longer be in the Blood, although it came originally from thence, and ſo corrupt the ſubſtance of the parts, and that will corrupt the nouriſhing Juyce; as I ſhewed, and ſo cauſe, and nouriſh an Elephantiaſis. Theſe venemous Seeds in the Blood, except the Blood be firſt infected, and then the parts of the Body from it, may come from ſome Corruption in the ſame; or Putrefaction, in which the blood may be turned into Venom. as in other poyſons, whereof we have ſpoken in other Diſeaſes, among which as ſome are ſaid to come from the Terms, which are accounted venemous, ſo they ſay the Elephantiaſis comes alſo, not only in a Woman, when her Courſes are ſtopped, but in a Man by Infection, when he hath had to do with a menſtrous Woman, or in a Child conceived at that time. All which come not from the menſtrual Blood, becauſe it is not of its own Nature in ſound women, filthy, as we ſhewed, except that it or other blood, for other Cauſes contract ſuch evil as may produce the venemous Seeds of an Elephantiaſis. And it is hard to judg by bleeding, whether it comes from meat or a Diſeaſe afore going, or what kind of Venom it is but by the effect.

In the Cauſe of the Elephantiaſis begin other Humors, as Melancholy (as ſome think it is) or any other, and if it proceed not from its certain quality (though hurtful) or if it be Naturally in Humors preternatural, or become ſuch from Corruption; becauſe other Diſeaſes come from thence, which are not found in an Elephantiaſis, but then alſo it wil come from the corruption of them, from whence theſe Humors receive a venemous and malignant Quality fit to produce an Elephantiaſis, they will produce it, that as we ſhewed of Blood by driving it the outward parts of the body, and by infecting them.

It is thought that this Leproſie is contracted by extream Cold external of the Body, when men have been long in Water, Air, or Snow, or after vehement Heat, as bathing they endure a great cold, or when they cool a hot Tumor, as Eryſipelas too ſuddenly. But becauſe other accidents come from thence, as when there is extream cooling, the extinguiſhing of Natural Heat and Mortification of the part, we cannot make this a cauſe of the divers accidents in this Leproſie.

Nor can we affirm that other Tumors and Ulcers in theſe outward parts, can be turned into this Diſeaſe, although many think it to be poſſible in an Eryſipelas and Herpes, becauſe when they are changed into a malignant Scab, which the Greeks call a Leproſie, they take it for a kind of Elephantiaſis, from which it differs, as I ſhewed. And if any external Diſeaſes ſhould turn into this, the Humors that cauſed them, muſt firſt of Neceſſity turn into a venemous Quality by Corruption.

The part affected in the French Pox.

In the French Pox, that Venom which produceth it, is chiefly in the Membranes which cauſeth Diſeaſes there and Pain, as we ſhewed. As pains about the Periostium, or Skin, or Bone, where there is no fleſh in the Head, Shins, Breaſt, and Nodes in ſome places. But the Elephantiaſis chiefly in the skin, the mouth Jawes, Noſtrils, cauſeth the Hair to fall, Spots, Ulcers &c.

An evil quality is the cauſe of the French Pox.

The Diſeaſe of the French Pox is a Diſtemper of theſe parts, and ſuch a venemous quality, as is fit not only to produce ſuch accidents as are in the Elephantiaſis but more, and great pains; as appears by what is ſaid in Elephantiaſis, and in the ſecond Book of the Pox.

Where we have at large declared, where and how this Venom comming of a venemous Cauſe, can by contagion by the Copulation of Male and Female, or other touching, or by Spettle, or by a Vapor or Humor, be carried into the Membranes and infect them, and bring forth the accidents mentioned, ſo that we ſhall not need to repeat it here.

A malignant quality is the cauſe of the Scurvey.

Alſo in the Scurvey, a certain ſecret poyſon which produceth a venemous Quality breeds the like Diſeaſe, as appears by the Diverſity and the Malignity of the accidents thereof, which are alſo in the skin, as Spots in the Legs, Puſtles, and Ulcers, Swelling of the Gums, and other inconveniencies. And we rather determine this to be the cauſe, then a melancholick Humor, to which it is attributed by ſome, that they may not flie to an occult Cauſe, as in other Diſeaſes, whoſe Malignity ſhews them to come from Venom. And I had rather leave it to the Inhabitants of thoſe parts, where the Scurvey is moſt to judge whence this Venom aroſe, and got into the Body, and whether it came by Sea into the North as the French Pox; then ſearch into the Cauſes of Venom which are hard to find out, and not to be known but by their Effect.

The Cure.

The Cure of Elephantiaſis.

Elephantiaſis, although it be onely in ſome parts of the skin, yet is it hardly prevented at firſt, and cured when old, eſpecially when hereditary. Nor have we found them that cure it, though they brag when they cured only an Itch, as if they had cured a Leproſie. Yet it is not to be neglected, but at firſt oppoſed by all means, that if it be not cured, it may be allayed. And we muſt remove the accidents as they come forth, becauſe without them the Patient may live long. And becauſe they cauſe great Deformity, that they may be leſs ſuſpected when they keep men company, there may be a palliative Cure: which great Men do intreat from Phyſitians with great promiſes.

The Cure is two wayes, firſt generally of the whole Diſeaſe, the ſecond particularly of the accidents.

The general Cure, is to labor as much as may be to take away the poyſon which is the cauſe, with Evacuations, and to correct the venemous Quality. But becauſe as yet the Medicines are not found out which do it by a peculiar vertu, as in the French Pox, and we cannot proceed that way, the beſt way is to take away the accidents. And therefore it muſt be done as the venemous Itch, and the evil Spots, Puſtles, and malignant Ulcers are cured, by the means following.

You muſt purge as you find the Body abound in Excrements; and becauſe you cannot purge Venom, yet purge Melancholy, and uſe things to abate it, ſuch as allay the ſharpneſs with Moiſtneſs and Cold. Thoſe which are good againſt al ſalt cholerick humors, as the Scab and Pox are here alſo good, with which you may purge twice or thrice every Spring and fall, to prevent evil, and other times, if the Body be foul.

Firſt uſe gentle things for the common Excrements, as a ſharp Clyſter, mentioned in divers places, in the Cure of Melancholy.

Or give Caſſia, Catholicon, Tryphera perſica, or Saracenica, or Diaſena, with convenient Waters, or Decoction of Peaſe, or Goats Whey.

Or, Take *Rhubarb infuſed in Endive water, or Whey one dram or four ſcruples, Syrup of Roſes ſolutive one ounce and an half, Caſſia, Catholicon, or Tryphera perſica half an ounce, with Bugloſs and Fumitory water;* make a Potion.

And that the Excrements may abate, give a Vomit inſtead of that Potion, if it hath been uſed, weaker or ſtronger of Hellebore.

Prepare afore purging with Syrups of Violets, Fumitory, Bugloſs, Endive, the compound Syrup of Fumitory, of water-lillies, Gourds diſſolved with Fumitory, Hops, Bugloſs, Endive,

Endive, Succory, and Sorrel-water, &c. and a little Trionfantalon.

Or with this Decoction: Take *both Bugloſſes with the Roots two handfuls, Graſs roots, Sparagus, Liquoriſh, each two ounces; Capar barks, and Tamarisk, each one ounce; of Endive, Succory, Lettice, Maiden-hair, each one handful; Cordial flowers, red Peaſe, each one pugil; the four great cold Seeds ſix drams, Aniſe-ſeed two drams, Raiſons two ounces;* make a *Decoction and in two pints and an half of it, diſſolve of the Syrup aforeſaid* as much as is ſufficient, *or Sugar, with Trionfantalon: for five or ſix doſes.*

Or this Julep mentioned in the preparing of Melancholy, which begins thus. Take *Syrup of Violets, Borage &c.* Or thus: Take *Juyce of Bugloſs, and ſweet ſented Apples,* or the Decoction that begins thus: Take *of both Bugloſs-roots &c.*

We purge with this after Preparation. Take *Rhubarb infuſed in Endive water one dram, Agarick infuſed in ſyrup of Roſes ſolutive, two ſcruples, Confectio Hamech, or Diaſenna three drams, Syrup of Violets one ounce and an half, diſſolve it with Fumitory, or Hop-water.*

Or give this Bole. Take *Catholicon half an ounce, Confectio Hamech two drams, de Succo Roſarum, one dram, with Sugar,* make a *Bolus.*

Or this Potion. Take *the Herbs and Roots of both Bugloſſes, or Succory, or Endive, Fumitory, Hops, each half an handful; Endive, Purſlain, Melon, and Citron ſeeds, each half a dram; Aniſe ſeeds one dram, Cordial flowers one pugil, Raiſons one ounce, Prunes five pares, pulp of Tamarinds half an ounce, Liquoriſh, and Polypody, each one ounce; Senna ſix drams, Epithymum two drams, with ſome convenient Liquor and Sugar* make a Potion, you may add *Myrobalans, Rhubarb, diſſolve Electuaryes therein.*

Inſtead of theſe, you may give the purges mentioned in Melancholy, as that which begins thus. Take *Chatholicon one ounce, &c.* Or thus, Take *Senna, Polypody &c. or the Pills there mentioned.*

We prepare and purge with this Apozeme. Take *Graſs roots, Aſparagus, Butchers-broom, barks of Capar roots, Aſh, and Tamarisk, each two ounces:* mix them *with ſharp Wine,* or adding *a little Vinegar, take the Roots of Liquoriſh three ounces, of Elicampane one ounce, the Herbs and Roots of both Bugloſſes, Succory, Sorrel, Docks, each one handful; Fumitory, Hops, Mercury, Scabious, the Capillars, each two handfuls; Endive, Lyons-tooth, Lettice, Liverwort, Ducks meat, each one handful; Betony, Thyme, Tops of Roſemary, Groundpine, Germander, each half a handful; Cordial flowers, Broom, Tamarisk, and Water-lillies, each one pugil; the four leſſer cold Seeds half an ounce, Sorrel ſeed two drams, Aniſe ſeed three drams, Fennel ſeed two drams, red Peaſe one pugil, Jujubs and Sebeſtens, each five pairs; Tamarinds one ounce, Polypody of the Oak four ounces, Senna three ounces, Carthamus ſeeds bruiſed one ounce and an half, Epithymum ſix drams:* boyl them all *in Water, with the Roots,* and their Infuſion as was ſaid, adding *as much Sugar as is ſufficient, with a little Sanders, cinnamon, or Powder of the three Sanders, or Diamargaricon frigidum. For five or ſix doſes.*

Let purges be given by turnes, ſome daies together, or once or twice in three or four daies, as the Body aboundeth with Excrements.

Syrups for this purpoſe will keep longer; made of the Apozeme before mentioned, that purgeth and prepareth, of Roots, Herbs, Flowers, Fruits, and Seeds, adding *two ounces of Tamarinds, ſix ounces of Polypody, Senna four ounces and an half, Carthamus ſeeds bruiſed three ounces, Epithymum one ounce, black Hellebore half an ounce, boyled in Water, and ſtrained,* adding *Citron, and Indian Myrobalans rubb'd with Oyl of ſweet Almonds, each three drams, Rhubarb half an ounce, Spike half a dram, Cinnamon one dram, Agarick five drams,* ſtrain it, and add *Syrup of Roſes ſolutive four ounces, Sugar half a pound:* boyl them to the conſiſtance of a Syrup, you may give it alone, or with Peaſe Broath, or Whey or the Decoction of pot Mercury, or with proper Waters.

A Syrup of Juyces: Take *Roots of Polypody, Liquoriſh, each three ounces; Senna four ounces, Carthamus ſeeds bruiſed two ounces and an half, Epithymum ſix drams, Tamarinds two ounces, Raiſons one ounce, Aniſe ſeeds two drams:* boyl them *in Goats Milk Whey, take two pints of it ſtrained,* and add *the Juyce of Fumitory, Hops, Bugloſs, Scabious, Docks, each three ounces;* boyl them again, and skum them, then add *Sugar half a pound,* boyl it to a conſiſtance, and add *a little Cinnamon, and Sanders;* if the Juyce of pot Mercury be added, it will be better.

The Infuſion or Decoction of Hellebore to take away the ſharpneſs, is thus made. There is a Decoction made of Endive, Succory, and both Bugloſſes in Water,. and in ſix pints thereof ſtrained, they infuſe one ounce and an half of the Roots of black Hellebore ſliced, and after ſteeping a while, they boyl it till two parts be conſumed, and of the third part, they give four ounces, with half an ounce of ſyrup of Violets for ſome daies together.

Two drams of the Pouder of Epithymum, with Whey is given for a month together every morning, it will work better, if one dram of the Pouder of Senna be mixed with a dram of Epithymum, and half a dram of Tartar, and one dram of Sugar Candy with Whey; to which you may add Turbith, and ſome Spices, and this is better then the pouder Diaſena.

A pleaſant laxative Electuary. Take *Pulp of Tamarinds one ounce and an half, Pulp of Caſſia two ounces and an half, Pulp of Raiſons, and ſweet Prunes, thick Juyce of ſweet Apples, each one ounce; ſyrup of Violets, and Roſes ſolutive each one ounce and an half; Diagridium two drams, powder them with half an ounce of ſugar candy, Turbith three drams, the pouder of Liquoriſh, and Cinnamon, each one dram and an half,* make an Electuary, give two drams at firſt for tryal, and after more or leſs, as it worketh.

It will have more taſt like a Medicine, if you leave out Diagridium and Turbith, and mix with the Pulps Catholicon, Trypher a, Syrup of Roſes ſolutive, with infuſion of Rhubarb, or the Pouder of Rhubarb and Senna, or the ſtronger purging Electuaries, as that of the Juyce of Roſes, Hamech, Diaſenna, de Citro.

The Purges mentioned in the Cure of Melancholy are here proper, as that Apozeme or Syrup of Juyces, or the Wine, or the Electuary; alſo the Pouder.

Alſo theſe mentioned in the cure of the malignant ſcab, as the Whey with other Ingredients, alſo the Syrups and purging Decoctions, that Syrup of Juyces, the purging Wines, and chiefly the Decoction of Hellebore, and other Potions, Electuaries and Pills, there mentioned.

Alſo many purges mentioned in the French Pox, eſpecially from the abundance of ſharp Humors.

After purging ſtrengthen the Bowels, with Conſerve of Roſes, both the Bugloſſes, Succory, Violets, Maidenhair, Water-lillies, or Diarrhodon, Trionfantalon, Diamargariton, or Treacle, or with Conſerve of Bugloſs.

Before purging they uſe to let blood ſpring and fall, to make a general Evacuation, but the Seeds of this Infection cannot be taken away thereby, in regard the blood in the Veins is not infected; as we ſhewed, and therefore it ought not to be. They bleed firſt in the Arm, and when the Body is full, ſome daies after in the Hand and Foot, and the common people think often bleeding prevents it; but the Body being conſumed thereby, the Infection will come ſooner and more. Therefore they are too raſh, who when they examine this Diſeaſe let Blood for tryal of it to ſatisfie the vulgar.

They alſo think Scarification every month, upon the Shoulders and Legs, with Cupping-glaſſes, is very good, and alſo Horſleeches.

It is profitable to provoke the Terms if they be ſtopped, by opening the Ankle Vein or the like.

It is excellent to open the Hæmorrhoids with Horſe-leeches and the like.

Sometimes we burn with actual and potential Cauteries as the laſt Remedy, not only in the Arms and Legs which is moſt uſual, but in the Head.

The Antients adviſed Men to be gelt when they were deſperate and paſt other Cure, and that to change the temper of the whol Body, making them effœminate, and of another Conſtitution. And this they did with leſs difficulty, becauſe Lepers were forbidden Copulation, leaſt others ſhould be infected thereby: and taking away of Man-hood did then no hurt, but cauſed their Cure.

We alter their Conſtitutions, to bring them to a better, but when there is no manifeſt Diſtemper, you cannot adminiſter contrary things certainly: but for the moſt part we give thoſe that prevent ſharp Humors and aſſwage them; Moreover, ſeeing they have a Drineſs and Conſumption, we give things to moiſten and refreſh and reſtore, ſuch as are mentioned in the Hectick Feaver, and theſe following:

Let them live in pure Air, not hot but temperate, and far from them of the like Diſeaſe.

Let the Meat be of good Nouriſhment, of young Creatures, Broaths, Eggs, Milk, pot Herbs, Fruits that moiſten and are temperate, as in Hecticks and Conſumptions.

The fleſh of Frogs, Cray-fiſh, Sea and Land Turtle, are good here, as in Hecticks.

Let the Drink be Wine not too ſtrong, or with too much water; ſomtimes Goats milk, and the Decoctions preſcribed for Hecticks.

There are Medicines that cool and moiſten, and temper ſharp Humors, mentioned in the Cure of external Diſeaſes, which you may uſe here, and the Syrups, Waters, Confections, and Conſerves preſcribed for a Hectick Feaver.

Among the reſt this Electuary is moſt proper. Take *conſerve of Bugloſs flowers one ounce and an half, of Succory, Violets, Water-lilly, and Roſe flowers, each one ounce; of Maiden-hair, and Roſemary flowers, each half an ounce; candied Bugloſs roots one ounce, of Trionſantalon, or Diarrhodon Diamargariton frigidum, each half a dram, of the Troches of Camphire one dram, with Syrup of ſweet ſcented Apples:* make an Electuary.

Let him drink after it Fumitory, Bugloſs, or Endive-water, &c.

Many other Medicines for the Liver and Spleen, which are thought to be the cauſe of this Infection may be given, and to be applied outwardly, mentioned in the hot Diſtemper and Obſtruction of the ſame: but except we are certain that the Liver and Spleen are diſtempered, they are given in vain.

There are Antidotes which have a proper Vertue againſt Leproſies, as theſe following.

Vipers fleſh (many waies taken) is held beſt, and they ſay the fleſh of other Serpents, as thoſe which the Germans call *Blindenſteich* or blind Vipers, theſe take off the skin and the faults thereof; becauſe theſe Serpents caſt their skins every year, therefore they ſuppoſe they may cauſe man to do the ſame.

This Vipers fleſh is given divers waies prepared, ſometimes boiled in Broath with Salt, and Eels their skin ſtript off, or peeled off by boyling, their Heads and Tayls cut off and Guts taken out: and ſo, if you perſwade them to eat Eels, they will leſs disdain the Food; you may alſo boyl them, and mince them otherwaies, that they may not be known; ſome report that by the uſe of theſe, the skin of the Leper hath peel'd off in divers polluted places.

The Broath ſometimes is ſufficient in which theſe have boiled, or they eat it with the fleſh, in which you may boil Salt, Aniſe ſeed and Dill, others add Mints and Leeks.

A Syrup made of this Viper Broath, with Sugar and cinnamon, will laſt longer.

Some ſay that if you fat Hens with Vipers fleſh till their feathers fall off, and then boyl them, and eat them, they will do the ſame.

Some give Wine in which Vipers have died.

Alſo the fleſh of Vipers is dried and made into Troches to be kept, when Vipers cannot be had. They take the fleſh only without the skin, Head, Tayl and Guts, and boil it with Dill and Salt, then beat it, and with the Broath make it into a paſte, with Wheat-bread the fourth part, and ſo make it into Balls, and dry them. Theſe are called the Troches of Vipers.

Theſe troches are ſeldom uſed by themſelves, but with Conſerves, ſuch as are mentioned in the Electuary above, and if you add one dram of the troches to that Electuary or more, it will be better. Theſe troches are in treacle, to to reſiſt Venom, and therefore it is good againſt the Leproſie.

As the Vipers caſt their skins, ſo the Cray-fiſh caſt their ſhells every year, and therefore are thought of as much vertue as vipers; they have a refreſhing and reſtorative vertue, *Dioſcorides* gives the fleſh of Hedghogs dryed and roaſted, and Salamanders with other Medicines, and if they can do any thing, it is by a propriety.

Some Hiſtories if not Fables, ſay that mans blood taken when he is newly ſlain, and drunk is good, and alſo a water diſtilled thereof, ſome ſay Harts horn, and Ivory is good againſt Leproſies, as well as other poyſons, and great Men have Vnicornes horn at a dear rate for that purpoſe.

Some magnifie the Powder of an Emrald.

The Chymiſts promiſe the perfect Cure of the Leproſie by the uſe of *Aurum potabile*, or high tincture, of Antimony, the true tincture of Coral, with proper Purgers, among which they extol the ſecret of Coral, Mercurius dulcis, Antimonial Pills that purge onely by ſtool. The famous Dr. *Hartman* in chymical Practiſe, commends the uſe of the ſweet Eſſence of Sulphur, Vitriol, for the Cure of the Leproſie.

The outward means uſed in a general Leproſie, are baths, to take away the Venom in the skin, by often uſe of them to prevent and cure the Leproſie, or at leaſt to take away the Deformity of the Ulcers, Nodes, and Roughneſs of the skin. Theſe are Natural or Artificial.

The Natural Baths are of ſweet Waters warmed, uſed at certain times, the Body being well purged before and after, Spring and Fall before and after Dinner, ſitting in them, uſing them till the skin flouriſh, and grow ſound, and theſe take away the malignant cauſe that lyes in the skin.

Hot Natural Baths are ſtronger, eſpecially of Brimſtone, ſuch as are in *Helvetia, Argovia, Valeſia*, and Bath in *Summerſet-ſhire*, which as they cure all ſorts of Scabs, ſo the Leproſie, or take away its Malignity, and at leaſt abate all accidents, if not take them away, if they be long uſed. And therefore they go to the Baths to conceale the Leproſie, and we ſend them thither after Examination, when we doubt to ſee what change will follow.

Moſt artificial Baths, are to be uſed long, and they muſt ſit in them, they are of Water and things that cleanſe and make thin the skin, and ſo conſume the evil Juyce, as roots and Leaves of Marſh-mallows, Docks, Dwarfe-elder, Elicampane, Roots of Dragons, wild Cowcumbers, Briony, Sowbread, Orris, Raddish, Bath, Hellebore, Lillies; alſo Leaves and Roots of Mallows, Bugloſs, Succory, Endive, Sowthiſtle, Beets. Alſo Wormwood, Senna, Fumitory, Hops, Scabious, Sopewort, Pellitory, Violets, Liverwort, Duck-meat, Groundſel, Sorrel, Agrimony, Mugwort, Plantane, Golden-locks, both Ivyes, both Celandines, Water-lillies, Tamariſk, Flowers of Chamomil, Melilot, Elder; alſo Beans and other Pulſe, Bran, Line-ſeed, Fenugreek, and all Guords.

They add to theſe Salt, Brimſtone and Allum, when the Decoction is not ſtrong.

Others are added for the Joynts, Primroſe, Groundpine, alſo Calaminth, Roſemary, Lavender, and the five opening Roots.

Theſe moiſt Baths which were mentioned for the malignant Scab or Itch are not unlike theſe, and that is beſt, which hath Chalk or Lime in them. And the Decoctions to take away ſpots, may be good here for a Bath.

Some Hiſtories ſay that a bath of Mans blood hath been uſed to ſit in with ſucceſs.

Dry

Dry Baths in hot Houſes, becauſe they too much inflame the Body, and violently draw the Humors to the ſuperficies of the body, are not ſo commended, but we may prepare the body for the moiſt Bath by the ſteam thereof.

There are Waſhes for the parts affected, with Puſtles, Ulcers, and Roughneſs of the skin, to take away (if poſſible) the Malignity.

They are made of Cleanſers and Dryers, and ſuch as have a propriety, as Serpents and Vipers. The Greaſe of Vipers, they ſay, will take off the skin and its faults, as well as the fleſh eaten; alſo the Oyl wherein their fleſh was boiled, or a quick Viper drowned, ſome mix the fleſh boiled, with Oyntments.

Make this Oyntment of the aforeſaid. Take *the Roots of Dragons, and Cookow-pintles, Daffodil, or Lillies, Elecampane, Beets, Saffron, each one pound*; beat them *with Oyl of Roſes Omphacine*, add *half a pound of Unguentum Citrinum, Vipers Greaſe three ounces, Turpentine half an ounce, Oyl of Wheat, or Yolks of Eggs one ounce and an half, Oyl of Tartar two ounces, Sulphur vivum, Niter, each three drams; Lytharge, or Ceruſs half an ounce, burnt Borax ſix drams, Tutty prepared, Sarcocol, Frankincenſe, each two drams; the Mucilage of Line-ſeed two ounces, Juyce of Docks, Fumitory, Lemmons, each three ounces*; make them into an Oyntment, for rough, ulcerated and puſtuled.

Or thus: Take *Juyce of Lemmons, or Oranges, or Citrons, of Docks, Fumitory, Scabious, Elicampane, one pint, Vinegar two ounces, Aqua vitæ one ounce, Oyl of Roſes Omphacine, Myrtles, or Maſtick, each four ounces and an half*; boyl them till the Juyces be conſumed, adding *Oyl of Yolks of Eggs, two ounces, of Tartar one ounce and an half, French Soape, two ounces, Vipers Greaſe four ounces, Pomatum two ounces, the Gall of a Bull or Goat half an ounce, the Mucilage of Fleabane, or Line-ſeed two drams, Honey one ounce and an half, Roots of Dragons, wild Cowcumbers, Sowbread, Orris, each three drams; both Helebors two drams, Staphiſagre, Raddiſh ſeed, each one dram; and Borax and Tartar burnt, each half an ounce; Quick-brimſtone three drams, Cuttlebone two drams, Snails burnt to Aſhes, one dram, Camphire one dram and an half, Lytharge, Tutty and Ceruſs, each one dram and an half*; mix them well for a Liniment.

To theſe may be added Oyl of Bread Corn, of Raddiſh ſeed, of Vipers, Juyce of Sowbread, and Niter.

Alſo Quick-ſilver may be added, which though it doth not deſtroy the Venom, either in Leproſie or French Pox, yet it taketh away the accidents in the skin, uſe it not in quantity, as you do in the Pox, eſpecially if you anoint all over, leaſt it cauſe ſpitting, becauſe it will not cure an Elephantiaſis, apply it onely where the accidents are in the particular parts: one ounce with the former Oyntments is enough, if it be uſed all over.

Or make this Liniment therewith. Take *Unguentum Citrinum four ounces, Oyl of Eggs one ounce, Oyl of Tartar half an ounce, Quick-ſilver diſſolved with Turpentine, and the oyntment preſcribed formerly, half an ounce, Juyce of Lemmons, or Oranges two ounces and an half, Borax two drams, Roots of dragons, Docks, Daffodil, Lillies roaſted and beaten, and mixed with the aforeſaid two ounces.*

Treacle of Andromachus, and Oyl of Juniper added to theſe Oyntments, will much increaſe their vertue.

Particular Applications are only to the parts affected, to take away Deformity, though they cannot cure. And they are uſed to the Puſtles and Ulcers external, to diminiſh or take away, or to correct them, as the falling of the Hair; but we muſt uſe them chiefly to internal, leaſt they produce worſe accidents, as in Puſtles and Ulcers internal, mentioned in difficulty of breathing.

Medicines are applied outwardly to Puſtles, in the Face and other parts, and they are of dryers and cleanſers, or Cauſticks that is burners. As we ſhewed the blackneſs of the skin, in the Diſcourſe of Pains and Spots, Puſtles, and Freckles: which Remedies may be uſed here, either gentle ſtrong, or burning, when Puſtles are to be taken off. Theſe are applied in divers formes.

Diſtilled Waters are uſed for the Face, of things that corrode not.

As this. Take *Brimſtone ſix ounces, Tartar calcined, two ounces, Sal Niter, Cryſtal calcined, each one ounce; Frankincenſe, Myrrh, each three drams; Camphire one dram, Juyce of Docks four ounces, Juyce of Lemmons two ounces, Roſe, Beanflowers, Lilly flower, or Plantane water one pint*: diſtil them.

Another Water. Take *Tartar calcined four ounces, Borax half an ounce, Frankincenſe, or Maſtick two drams, ſugar candy one ounce, Camphire one dram*; pouder them, and mix them *with Mucilage of Fleabane, or of Gum Traganth in Bean-flower water, or Water-lillies, ſix ounces, three Whites of Eggs beaten, Juyce of Lemmons, or Oranges two or three ounces*: diſtil them in an Alembeck.

Other Waters mentioned in Diſcoloration, which have Urine, Tartar, and Sublimate are here good; and thoſe for a red Face, for Lytharge, and Tartar and the like, and thoſe for Spots made of Tartar.

A white Liquor for the Face, like Virgins Milk: Take *Lytharge one ounce and an half, Vinegar ſix ounces, Juyce of Lemmons or Oranges two ounces, Alume, or Sal Gem. two drams, Tartar calcined half an ounce, Camphire one ſcruple*: ſteep them, and ſtir them often, or boyl them a little, if you muſt uſe them preſently.

Or boyl in ſtrong white Vinegar, equal parts of Sulphur, Niter and Cryſtal finely poudered, and waſh the face with it ſtrained.

There are others mentioned in a red Face, and in Diſcoloration of Brimſtone, and Milk, and Lytharge; alſo Lac virginis, or Virgins Milk ſo called.

There are divers Oyntments for the parts, mentioned in Diſcoloration, as Unguentum citrinum for the Face, and in a red Face and other Spots, made of Juyce of Plants, of Oyl of Eggs, Tartar, and Hellebore, of the Blood of an hare and Galls, eſpecially of a wild Goat approved by *Dioſcorides*, alſo Oyl of a Lizard.

Another Oyntment excellent againſt puſtles. Take *aloes three drams, Aſarum roots one dram, both Hellebors, each half a dram, ſtaphiſagre one ſcruple, Coloquintida half a ſcruple, with Bulls gall*, make an Oyntment for the Face.

Oyntments made of Quick-ſilver, mentioned in Diſcoloration, and in the French Pox, are good here.

Some extol this, ſteep two or three Eggs a long time in ſtrong Vinegar, till the ſhell be conſumed, then beat them with the fourth part of Vinegar, and add Frankincenſe, for the Face; and it is ſtronger with black Soap.

The Cauſticks againſt puſtles, made of Sublimate for the moſt part, are mentioned in the Cure of Spots in Diſcoloration. Alſo Cauteries, theſe we may uſe in the Elephantiaſis.

Or this: Take *Unguentum Citrinum, Oyl of Tartar, each half an ounce; Juyce of Lemmons one ounce, ſublimate half a dram, Vipers or Hens greaſe half an ounce*: make a Liniment for the Face.

Some gather the Worms that breed in a Viper that is buried, and dry them, and mix them with Cantharides, and ſharp Vinegar to an Oyntment.

To waſh off the Oyntments and other things, take a decoction of Bran, and Beans ſhaſed, Peaſe, Rice, Barley, Lupines bruiſed, not in Meal, leaſt it turns to a paſt in boyling, adding the Flowers of Beans, Water-lillies, and an Orange cut in pieces.

Or waſh with Bean-flower-water, or the Decoctions mentioned for a red Face.

In outward creeping hard Ulcers, many mentioned for puſtles are good; and theſe in pains, for malignant ulcces, are here good.

We ſpake of Medicines againſt falling of the Hair, in deformation.

In the internal puſtles of the Noſe, Palate, Jawes, we uſe thoſe mentioned for other Ulcers, and when the Uvula is eaten off, and there is Hoarſneſs, as we ſhewed.

Alſo we give things mentioned in ſhortneſs of Breath and Hoarſneſs, and if the Noſe be ſtopped, you may know there, what to do.

When

When a fleshy red skin grows in the Eye, least it cover the sight, and cause Blindness, it must be presently prevented, with things mentioned in the Cure of the skin or film of the Eye; if the Eye brows are red or rough, there are Remedies.

The Cure of the French Pox.

The French Pox, albeit it comes from an external hidden Venom, yet daily Experince shews it is curable, yet with pains, and more when it is old and deep rooted, and hath many evil accidents; of which some remaining, when the rest are cured and are incurable.

The Cure is general of the whol Pox, or particular of its accidents.

The general Cure which respecteth the Pox and its accidents, is in taking away the Cause, that is the Venom, brought into the Body by Infection, and the Disease that it caused: That is the Quality or hurtful Distemper in the skin and Membranes.

Experience hath taught us that this is done by Evacuations, and Reason sheweth how, that is when the Excrements desire to be expelled with other Humors, by Sweats and other waies, they discharge the Venom also. And the sooner, if the evacuating Medicines have a secret force or manifest quality of drawing out the poyson and consuming it, then it is better drawn out, and the evil quality departeth, and the more perfectly, if they have a propriety hidden, by which they oppose the pox, resist the poyson, and take away the noxious Quality.

These Remedies which thus cure the pox do it not by one kind of Evacuation, or by a consuming force or propriety. Therefore we cannot divide the Cure according to their Operations. For the better declaring the Cure, we shall speak of the way by Guaicum, and by Quick-silver; and by others since invented. First, we will speak of the Cure without Quick-silver, then with Quick-silver.

The Cure of the pox without Quick silver is twofold, one by sweat chiefly, the other by purging.

The Cure which is chiefly by sweat, is done either by inward or outward Remedies.

The Cure by inward sweating Remedies, is the oldest and most usual, and it is done first, by giving things that provoke sweat, and if they have a propriety against the pox besides, they will do it the better; then by giving things which help forward this Sweating and evacuate the Body by slender Diet which is convenient; and besides these, you must first use other Evacuations, especially purges. This way of Cure is most desired and most in use, although it be long and troublesom, by reason of sweating, fasting and purging, because it is safer then other waies, which are dangerous upon the least mistake.

This cure is commonly by Guaicum, which was brought hither with the pox from the *Indies*, and hath been used for the Cure ever since; because it doth not onely cause sweat, but because it is thought to have a propriety to resist the Venom of the pox.

We make for this purpose a sweating Decoction of the Wood, which hath a sharpness and bituminous Sent, and somtimes of the Bark thus.

A plain Decoction commonly used. Take *of the dust, filings or shavings of Guaicum from the hard stock, or from a stick, which being barked or peeled is outwardly yellow, and inwardly black one pound, pour upon it twelve pints of Spring-water, let it stand to infuse in a glassed Vessel covered, then boyl it with a gentle fire by degrees, till two parts of three be consumed, of which pour the clear part after it is settled into a Glass, and keep it stopped, and keep the Fæces for the use that shall be after mentioned.*

It will be stronger, if, as they who boyl with more care, use to do, you add three or four ounces of the bark to the pound of Wood; or if you boyl it higher then is mentioned, or take at first but eight pints of water.

Being thus made, it hath not such a sent and taste as Physick, but it is a little sharp, and pleasant to the Party, when used to it; if any desire it sweeter, you may add sugar and Cinnamon; some do with Wine, but it is better without, because it is to be taken fasting, which will hurt the Head, and it will inflame the Body when they sweat, at which time it must be given also.

These must drink of this Decoction four, five or six Weeks, every morning fasting in their bed, a little warmed from six ounces to eight, arising by degrees, and so descending: and let them cover themselves to sweat after it, as long as they can two or three hours; and let them be wiped with hot Cloaths, and the sheets changed for others that are dry and warm, then let them rise, and dine about two or three hours after.

This Decoction is given three or four hours before Supper to strong Men, for the better Evacuation and speedier Cure, especially when the Disease is old, in the same quantity. Others take it again some hours after supper, but to no purpose, because it will hinder their rest in the night, and being to take it in the morning, it will be to soon, and will weaken him.

As for their Diet in this time, because it must be exact, they call all this course of Physick a Diet, because the patients desiring not to be known to have the pox, by their constant sweating and staying within, pretend that they use a convenient Diet only: this Diet is to be strictly observed in these particulars following.

Let the Air be hot in the time of the Cure, that he may sweat the better, and not have it driven in, by keeping a good fire all the time, and let him not go forth, except it be a hot day, and then only at noon.

Let his Meat be little, only so much as will keep up his strength, of good Juyce, and no Varieties, for the consuming of the Humors and Excrements, and that by reason of good Food in a small quantity taken, they may be hindered from Increase, by which the Cure will proceed the better, and Nature will be less hindered in sweating, being not burdened with meat, or called in to Concoct. Therefore let him keep a very strict Diet, and eat but twice in a day or but once if he can forbear, and that without gorging: Let him have but one dish or but twice at the most: and that it may be of good Juyce and not excrementitious, some eat only flesh, and bread and fruits, after this manner.

Hens flesh is most usual, and Chickens, boiled for broath or of old Hens or Cocks, because it is the pleasanter and stronger Broath, excellent against the pox, one quarter at a time of a Cock, is sufficient. Also Veal, Kid, Mutton, if tender, may be taken three ounces at the most, at one Meal; somtimes Pigeons, Partridges and Chickens roasted, may be given in the same quantity, Rear Eggs or the Yolks onely may be given, if you abate them so much of their flesh.

Four ounces of Bread are enough, for their Meat and Broath, because the Diet must be very slender, and it must be of pure Wheat, but a little leavened and well baked.

Dryed Fruits may be the second course, in a small quantity, such as fill not over much, as Raisons, Prunes, Figs, if they nourish much, as Almonds, you must abate so much bread.

As for Sauces, all salt things must be avoided, neither flesh nor bread must be salt or very little, not only because they hinder sweat (as they say) but because salt meat will make more thirsty, who by reason of sweating are apt to be so, whereby they will drink more, and be more hot and unquiet. Therefore Spices must be avoided or regulated, and sharp Fruits are forbidden, except they be given to allay the Heat.

Drink is not to be denied in this Disease, because it is quickly digested, and they may drink freely, if they be thirsty, because it refresheth them without burden, and helps Sweating, therefore at meat and between meals, let them drink except other things hinder; but no Wine, because it would inflame the Body, and hurt the Nerves and Head, and therefore we only allow a little to weak persons to refresh them either alone or with Water, Water boy-

boyled, to take off the Crudity, and to provoke Sweat the better, is commended. Thus, Take *the shavings of Guiacum which were boyled, put twevle or eight pints of water thereto*, boyl it to half, and strain it. This they may drink freely at Meate and othertimes, and it will not be unpleasant when they are used to it, especially if you add a little Cinnamon, or Sugar, or Raisons boyled therein, others add many things as Liquorish, which causeth a Physical tast, and make them loath it, except you put Wine to it which is allowed but in great weakness.

Sleep is allowed not only at night, but in the morning and before supper when they Sweat, because it doth not only provoke sweat, but being at rest they better indure it.

Let him walk about the Chamber, use Frictions or Rubbings, especially after Sweat, let him Comb and Rub his Head. Also,

You must keep the Belly loose which is apt to be bound by fasting and sweating. Let him beware of Venery, and refresh his Mind with Sport, Discourse and Musick.

You must alwaies purge before you begin to give Guiacum for sweating to void the thick Humors and Excrements. And sometimes you must purge in the time of the Dyet, the rather if the Body be fowl, that the Cure may proceed the better, because it helpeth the operation of the Guiacum by taking away the cause of the Disease. And because no certain humor, as was shewed, produceth this Disease, therefore you must direct your purges to the constitution, and to the quantity and quality of the Humors and Excrements. Thus,

First give an Emollient Clyster to take away the Excrements from the Guts that may cleanse, and be sharp, such as are prescribed in many places. Or a Suppository, or give Cassia, Manna, some molliting Decoction, the the Infusion of Rubarb, syrup of Roses Solutive, syrup of Peach flowers, Catholicon, and other mild Electuaries or gentle Pills, or Lozenges, such as are Mentioned in other Diseases.

These being administred, If the Body be ful, let blood in the Arme, which is not needful in the Flegmatick and leane Bodies, except used to it. Then prepare the Humors as we suppose they abound, if they be Cholerick or sharp, with syrup of Fumitory, Hops, Buglos, Mayden-hair, Endive, Succory, Violets, Apples, or the like with proper Waters, as of Scabious and the like, and so let him take thse Juleps some daies together before Purging.

When they are Flegmatick and ful of pain we add the syrup of Stœchas or French Lavender, which is very good made of Bettony and Hyssop, also Honey of Roses and the like, with the waters of those Plants, or of Calamints, Bawm, &c. And when there is pain about the bones, the water of ground pine and Prim-roses. You may also prepare with Decoctions made of the same Herbs.

We put Spices, as Cinnamon, into those Juleps, and Decoctions to make them pleasant. Or Trionsantalon, Diarhodon, Aromaticum Rosatum. Or give a Lozenge thereof after it.

Many times we purge and prepare at the same time, mixing gentle purgers, with the preparatives, when they are weak and Cholerick, or stronge purges when they are Flegmatick and Lusty. Proper for the Humors we intend to oppose especially such as purge watery, Salt, and sharp Humors, when there are Spots and Ulcers, such as were prescribed in divers Diseases, especially in the Itch. Or if there be pain about the bones, we must give such as are prescribed in the Diseases of the Joynts from watry Humors.

We give these Apozems or Decoctions for five or six daies to prepare and purge; Thus made, Take *the Herbs following with the Roots, Succory, Endive, Dandelion, Dockes, Sorrel, Buglos, Capillar Herbs, Scabious, Germander, of all five or six handfuls; Fumitory, Hops, pot Mercury, of each one handful; Asparagus, or Knee-holm and Grass Roots, of each two ounces, Cordial flowers three pugils, red Roses two pugils, Tamarisk flowers one pugil, Prunes ten, Raisons three ounces, Sebestens, or Jujubs twenty, of the four great Cold seeds and Annis seed, of each half an ounce; Fennel seeds two drams.* Boyl them in Water or in the Decoction of Guiacum strained, which is more proper. And infuse, *Senna three ounces or four, Polypody, Carthamus seed, of each two ounces, Epithymum two drams.* Boyl them again, and then add, *Sugar or Honey to sweeten it, with a little Cinnamon.*

In moist Flegmatick Bodies, add these following, *Calamus Aromaticus or Galangal one ounce and an half, Elicampane, Bettony, Majoram, each one handful, Rosemary, and Lavender flowers, of each one pugil, tops of Time one pugil and an half, Figs twelve, Caraway seeds one dram, and those that purge water, bark of Elder and Dwarfe Elder one ounce and an half: or stronger purgers, Agarick or Rubarb half an ounce, Turbith three drams, Soldanella two drams, or in strong men who commonly have this Disease, Hermodactls two drams in the pain of the bones. Or half a dram of the Pulp of Coloquintida tied in a cloute, which is strong, or one dram and an half of black Hellebore.*

If there be pain in the Head and Bones, you must add things good against it, and against Poyson, as Tormentil roots, and the like, you may use the Decoctions mentioned for the Itch, as that which begins thus. Take *the roots of Docks three ounces, of Grass, &c.* Or you may give purging Wines, made of the simples of the former Decoction, infused therein, or that prescribed in the Itch.

After preparation, or purging with preparation, we use strong purges, if we suppose the Body not purged sufficiently, we give strong Purges divers waies, by adding to the last draught of the Decoction, an Electuary, or the like that purgeth, or another Decoction, Electuary, or Pills, considering the spots, Pustles, Ulcers and Pains. Commonly they purge Melancholly that suppose it to be the cause of the Pox, and therefore they give Confectio Hamech and Diasenna, also Pills of Lapis Lazuli, of Fumitory, and others mentioned in Melancholly Diseases. And we allow these in strong people, because they Purge Choller and sharp Humors of all sorts. Other Purges also mentioned in the Cure of the Scabs, and if there be pains about the bones, Pils of Hermodactils, stinking Pils, or *Pilulæ fœtidæ*, and others mentioned in Arthritis. And many others mentioned in other Diseases, which have both Scammony and Coloquintida, which are used indifferently, though many think, they should purge but one Humor.

But Empericks and Chyrurgions presently purge, without preperation, before they use things that Evacuate by the habit of the Body and without choice of purges, or careing what Humor, so they do but purge sufficiently. Therefore they give the strongest. And among the rest Wine, wherein an Apple of Coloquintida hath been all night infused, or that wherein some of the lesser Spurge Seeds have been infused; or they bid them swallow the seeds, or they purge at first, with the Decoction of Hellebore, such as we mentioned in Cure of the Itch: where we shewed how the Empericks cured the Itch and other Diseases only with Stybium infused, which is good here also; As also how good purging at first in many perverse Diseases hath excellent succes, as with the dry leaves of the black Hellebore poudered and made into Pills with Aloes.

After Evacuation made, you must refresh the Body a day or two with Conserve of Buglos, Borrage, Roses, Stœchas, Rosemary, Marjoram, Treacle or Mithridate, and the like. Among Cordials those of Guiacum are best, and they give the Pouder with Conserves and Electuaries. And the Chymists Magnifie the Salt thereof, others use the Pouder or Salt of Sarsaperilla. There are usual Purges for the time of the Cure when they take their Sweats to keep the Body open, to be given between Sweats, divers Times.

You may make Syrup of the Decoctions mentioned that will keep, or use the Syrups prescribed for the Itch,

as that of Hellebore, or of Apples, and that of Montanus made of Juyces, or you may purge with Electuaries or Pills.

The Cure may be also by other Sweats besides Guiacum, and good Diet, and purging, such as are good also against other cold Diseases. And although they tast not, nor smel like Guaicum, yet they are thought to have a propriety to cure the Pox; as Sarsaparilla and China fetcht from the *Indies*, and known since Guaicum to be good.

They make a sweat of Sarsaparilla roots, which are long and slender, of like tast and no scent. thus,

Take *Sarsaparilla sliced three ounces, Water twelve pints*, let them be infused as Guaicum was, and boiled to the third part, which you must strain and keep, this quantity you may increase or diminish as you please.

They drink this Decoction every morning for some weeks, and somtimes at evening and sweat; first purging the Body, and at several times after, as we shewed concerning Guiacum.

Use the same order, for Air, Meat and Drink, and make a second Decoction of the same for ordinary Drink, and the like.

There is another made of China, which comes from China in the *East Indies*, to cause sweat; this Root is thick red and without tast, and the Decoction is reddish, not unpleasant, nor offending the Stomach, and thus made.

Take *China roots that are ponderous, two ounces, cut them in slices, add twelve or eight pints of Water*, steep them, and boil them, as the former, keep it being strained very close stopped, least it grow sour: or to prevent that, boyl half the quantity, and repeat it.

This is taken as the rest, and it provokes sweat, and the Patient must be governed as formerly, and purged, and a second Drink made of the same Roots as formerly: And being thrice boiled, they have some Vertue, and may be drunk while other is prepared.

There is another Root lately come from the *Indies*, called *Sassaphras*, of which a Sweat may be made, used as the rest for this and other Diseases, thus made.

Take *the Wood with the Bark sliced into Chipps, two ounces and with twelve or eight pints of Water*, infuse them, and boyl them as formerly, and give the same quantity as of the other; this is pleasant and better taken, because it disturbs not the Stomach, nor breeds wind, as may be gathered by its scent, resembling Anise and sweet Fennel seed.

There are sweating Decoctions for the Pox, made of three or four of the former Roots mixed, they add to half a pound of Guaicum one ounce and an half, or two ounces of Sarsaparilla, and boyl them with eight pints of Water, as the former.

Or instead of Sarsaparilla one ounce of China.

Or we mix Guaicum, China and Sarsaparilla in the same quantities, and boyl them: or we take less of Guaicum, and more of the rest.

To these we add Sassaphras, because it gives a good smell and tast, and is of the same Vertue.

These must be used in the same quantity, and with the same order and government as the former, and an ordinary Drink must be made of the same, by a second Decoction.

Somtimes they make Compound Decoctions with many other things, added to these, which they add many times to Guaicum, and Sarsaparilla, but seldom to Sassaphras, and China, least they loose their scent; somtimes they add things to correct, as when Guaicum is too hot Succory and Lettice, yet though it hath a little sharpness, it doth not inflame the Body; and if you take away the sharpness, it will not sweat so well, and rather hinder then profit, as also by those things, the pleasant tast is taken away, and it will be loathsom; somtimes they use things to increase the Heat, and cause more Sweat, as Asarum roots, Elicampane and Spices, and the opening Roots and herbs, Baulm, Time, Marjoram and the like, Nigella seeds, somtimes things good for the head and joynts if pain be there, as Bettony, Groundpine, Rosemary, and Lavender flowers; somtimes things to purge the Blood, as Fumitory, Hops, Bugloss, Elder, Dwarfe-elder, Orris and the like. And to dry the Body more, they use Amber, Frankincense, and Benjamin.

By this mixture, they make the Decoction of less force, and more unsavory, so that the Patient will not take it, especially when they ad Gentian that is so bitter, and Mummy which stinketh, then it is abominable. But if you will add to the Decoction any thing to allay the Heat, or to provoke sweat or the like, it is less unpleasant, when you boyl the Roots in the Waters of those plants which are for that purpose.

You may make your Decoction in Arsemart water, which is beyond all the other for its admirable propriety for cure of the pox, it is made of the Herb at the end of *September*, and all *October*, by Distillation.

Besides these many, mix gentle and strong purgers with Guaicum while it is boiled, as Polypody, Asarum, Epithymum, Carthamum, Agarick, and other bitter things, as aloes, and if the pain be in the Joynts, Hermodactyls. And somtimes the strongest, as Hellebore, and Coloquintida. Which purging Decoctions, if they be given at first before sweating, and used in the times of Intermission, are good. Or if we intend not to cure the pox by sweating but by purging, we may use them instead of other purges constantly or by fits with Intermission.

It is found by Experience that other plants besides Guaicum, Sarsaparilla, China, and Sassaphras make a good Decoction for the same. And hence we gather that these work the Cure of the pox, rather by sweating then by any hidden Vertue, such Decoctions are made of these following.

A Decoction made of yellow Box, which is hard like Guaicum, doth the same, but because it is not so pleasant as Guaicum, we take not a whol pound to twelve pints of water.

I have cured poor people with Juniper, and it is sweet and somwhat sharp. I took the Chips not so much as of Guaicum, but half so much or three parts, and with twelve pints of water I boiled and used it as the former; to these you may add Guaicum and other Roots; and it is an excellent Sweat and safe, although from *Dioscorides* some speak against it as destructive, which often use shews to the contrary: and I judge that place of *Dioscorides* to be false, and so do others.

We doubt not but a Decoction made of Cedar, Cypress, Sabine that bears the Berries, Wood-Aloes, Rhodium that smells like Roses, will do the same; and others as they write of the Turpentine-tree.

It is written by some that the Decoctions made of the Roots of Dittany, Tamarisk, Butter-Burre, Tormentil, Calamus, Elicampane, Cane roots, Orris and Sowbread in twelve pints of water will do as much as Sarsa and China in the same or less quantity.

And of Herbs, as Cleavers, or Goose grass, Ceterach, Scordium, and Rupture-wort, and you may use also Jack in the Hedg, and chiefly Arsemart.

Or of Seeds, of which Juniper-berries are the chief, the Decoction whereof made as the former, will have a sharp tast and sweet sent, and it is better then all the rest for cure of the pox by Sweat.

There are other Sweats to cure it besides, as sweating Wines made by Decoction or Infusion, for weak and cold persons, as this which is of Honey and pleasant. Take *Galangal two ounces, Ginger half an ounce, Cinnamon two ounces and an half, Cloves one ounce and an half, Nutmegs or Mace one ounce, Schœnanth half an ounce*, bruise them and put them in a Vessel, *with one pugil of Rosemary flowers or tops*, then add *ten quarts of white Wine, one pint of Honey or more*, keep it stopped for your use: drink three or four ounces of it every morning and sweat, continue it.

It will provoke sweat more, if you add four ounces of of Juniper-berries.

Or thus. Take *Orris and Calamus, each three ounces, Galangal*

langal one ounce, Asparagus one ounce and an half, Elicampane half an ounce, Sowbread roots two drams, Thyme, Scordium, Dittany, Rupture-wort, each one handful; Rosemary, Lavender, and Chamomil flowers, each one pugil; Juniper-berries six ounces, Cinnamon two ounces, Cloves one ounce, Mace half an ounce, Schœnanth two drams, bruise them, and put them in a Vessel *with four ounces of Guaicum, Sassaphras one ounce,* infuse them *in twelve pints or more of Wine:* let him drink it thirty daies or longer.

Another very powerful, with which alone some say they have cured the Pox. Take *Plantane leaves, Olive or myrtle leaves, Tarrow fresh gathered, each one handful; Sowbread two drams,* or more when the Party is strong, *white Wine five pints, give six or seven ounces of the strained Liquor,* let them sweat, and continue it every morning for five and twenty daies together.

Stilled Waters are given to provoke Sweat, but seldome alone in this Disease, because they agree not with the stomach, but they say that these cure some people, or take away the Reliques of the Disease.

This following is best. Take *Filings of Guiacum one pound and an half, the Powder of the Bark of the same, half a pound, Sassaphras Chips two ounces, Grass and Sparagus roots each one ounce and an half; Elicampane three ounces, Sowbread roots one ounce an an half, Carduus, Penny-royal, Sorrel, each one handful, Bugloss, Roses, Rosemary, Chamomil flowers, each one pugil; Cinnamon half an ounce, Nutmeg two drams,* cut them, then ad *Treacle of the best, four ounces, Spanish Wine, Dock and Succory water, each two pints,* distil them, give *three or four ounces of this Water, with other convenient Liquors, or the Decoction of Guiacum or the like Sudorifick, as of Milium, some add four ounces of Polypody, and one ounce of Epithymum to the former.*

There are other Sweats or Sudorifick Decoctions and Wines, stilled Waters and Electuaries good against other Diseases, which may do well here if often administred, such as were mentioned in the stoppage of Sweat and the like, especially those mentioned in the Cure of a pestilential Feaver, which are thought as good here. In this Disease being venemous, they cure not only by sweat, but by resisting of Venom. Among the rest the Treacle waters there mentioned are good.

As for Goverment, when they take these Sweats of wine or distilled Waters thus prepared, they must observe the same Rules, that were before prescribed, they must keep their warm Chamber, eat little, and no varieties, and for their Drink use the thin Decoction of Guaicum and Sarsaparilla; or if the sweating Wine mentioned, be pleasant, they may drink it at Meales, and if it inflame, it may be mixed with Water. And if you fear least the Liver or other Bowels should be inflamed by the use of these hot sudorificks, you must give some cooling Syrups to allay the Heat, and have a care the Belly be not bound, and that the Cure may go on the better purge the Body now and then.

The Cure of the Pox by outward Applications, without Quick-silver to cause Sweat, is not performed; but they must keep warm, as we shewed, and use bathing or hot Houses to farther it, the dry Bath or hot House is the best; for the Body there shut up is made hot and opened, and the Humors drawn forth by Sweat; and it may take away the seed of the Disease by long continuance, if it be not deep rooted. But in regard this hot House alone is not alwaies sufficient, if you will use it, let it be when sweat is hard to be provoked, by things given inwardly in the bed, and then to go into the Stove, and by its heat make way, and dispose the Body once or twice, till Nature doth it of her own accord, is good. The chief use of a hot House in the end of the Cure, is to take away whatsoever remains fixed in the skin, and to cleanse the same; and then we give leave to wash in the hot House with wine, water and lye, which could not be granted before. But in the Cure of the Pox, not only dry Baths are used, but before the Cure is taken in hand, if you doubt of the same by reason of the obscurity of the signs: And the often using of these sweating Baths, by drawing forth the hidden seeds to the superficies, will discover the certainty of the Disease by Spots and the like.

And because the use of those Baths is ordinary known, we will not speak further of them: but that they may sweat the better, we give the Patient before he goes in, Treacle or some other sweating Medicine; and we let him stay there as long as he can, and after we keep him from Cold.

A moist Bath either Artificial or Natural, is seldom used for the Cure of the Pox, because Experience teacheth that it doth more hurt then good by its Moistness.

Yet some there are that though they deny the Bath of sweet water, and other things that astringe too much, yet they allow things that rarifie or strongly attract, for the helping of the Medicines to work, when they are slow: and therefore use moist Baths before, in which they boyl hot herbs and flowers, and seeds of all sorts, especially Dwarfe-elder, and Elicampane Leaves and Roots, Mugwort, Chamomil flowers, Melilot, Juniper-berries, also Guaicum, and Juniper chips, yet these being not so safe may be left out. Others commend strong drying Baths, but I have observed that they do hurt and not good: except after the Cure, to refresh some Member that hath been wearied with Medicines, and to strengthen the Body, and then we add to the former Artificial Baths things proper for that, as Groundpine, and other Herbs mentioned in the pains of the Joynts.

The Cure of the Pox by purging is not so usual, because lately invented, and this is done by giving violent purges often, and refreshing the Body by turns. And sometimes it is cured by this way alone, without the use of any other Evacuations, Sweating or Fluxing. Sometimes we joyn sweating with purging, especially when the Patient will not endure strong purging, such as is required for this Curre, and then after purging divers times, we give the decoction of Guaicum some daies to sweat, and then purge again, and so as formerly till it be cured: sometimes we consume half the time in purging, and the other in sweating, with internal Sudorificks, also we use outward dry Baths, and mix purging by fits. And in purging, we choose not things for some onely Humors, because we know not it is that causeth the Pox, but any thing that will purge, for they which abound will be sooneſt evacuated when Nature is stirred up. And we observe that al Physitians, though they talk of purging, Melancholy or flegm, yet they use any kind, which we give according to the constitution, and strength, and as there are Spots, Pustles, Ulcers, or Pains, as we said for purging with sweating: these are divers waies prepared.

Of Decoctions and Apozemes, after general purging for a time, shorter if for fifteen daies together they take it twice a day, or longer, if the Patient being weak is constrained to rest a day or two often, and then to fall to it again, for then it will require three weeks or a month. Some continue this Course four or five weeks, purging three or four times in the week together, then resting three daies, in which morning and evening they take strengthners; and use good Diet, but not so strict and little, as when they sweat only: nor are they to be so prohibited the Air, but may eat often of the best, and walk forth sometimes when it is fair, which they desire, least they should be suspected to have the Pox by staying within, and therefore they like this way of cure best.

These Decoctions are thus made when the Body is hot and cholerick, spotted, pustulated, or ulcerated. Take *Polypody three ounces, Senna two ounces, Epithymum, Myrobalans, Citrin, and Chebulars, each two drams; Cordial flowers two drams, Capillar Herbs, both Buglosses, each one handful; Succory roots half and ounce, Anise-seeds two drams:* boyl them *in Water for five or six doses, sweetning them with Sugar, dissolved in each dose of the Juyce of Roses, and Fumitory, each half an ounce; or of their Syrups, or of Violets, each one ounce;* sometimes mixing *one dram of Rhubarb* infused in the Decoction,

coction, and sometimes stronger Electuaries if you will purge more, as that of Juyce of Roses, Confection Hamech &c. somtimes forbearing the Decoction, one day or two you may give a stronger purge, and then return to it again; thus let him continue taking those Potions by fits five or six times, and make new, stronger or weaker according to the Operation of the former, and while he is cured. And because it is troublesom to make the Decoction new so often, it is good to increase the quantity of Ingredients and Sugar, and boyl it to the consistance of a syrup, that it may last, and give that quantity thereof of that will purge sufficiently.

For those that are flegmatick, waterish and cold, if there be pain about the bones, this Decoction is made. Take *of Carthamus seeds bruised one ounce and an half, Senna two ounces, Polypody one ounce, Turbith half an ounce, Epithymum two drams, Raisons one ounce, Figs ten, Liquorish one ounce, Elicampane six drams, Galangal half an ounce, Thyme, Bettony, Marjoram, Hyssop, Groundpine, each one handful; Bugloss, Rosemary, Stachas, or Lavender flowers, each one pugil; Chamomil flowers half a pugil, Coriander seeds, and Anise, and Fennel, each one dram; Nigella seed half a dram*: boyl them *in Water, for five or six doses, sweeten them with Honey, and dissolve in each, the Juyce of Orris half an ounce, Syrup of Roses solutive, of Fumitory and Hops, each six drams.* If we will have it work stronger, infuse *Agarick or Mechoacan one dram, Ginger one scruple*, or mix an Electuary therewith, as Diaphœnicon or the like: these Decoctions are used as the formerr

Other Decoctions such as are properly against the Pox may be used, as of Guaicum, Sarsaparilla &c. which often used cure other Diseases as well as the Pox; as this following which must be drunk twenty five or thirty daies together, with a little Intermission, and that when necessity requireth. Take *Guaicum Chips one ounce, Sarsaparilla six drams, Liquorish half an ounce, Succory roots two drams, Bugloss flowers two drams, Raisons half an ounce, Prunes six*; steep them *in eight pints of water* a day and a night, then boyl and strain them, and add *a little Cinnamon in five ounces of this infuse half an ounce of Senna, Mechoacan or Agarick one dram, Ginger half an ounce*; let it stand a day and a night, strain it and add *syrup of Roses solutive, and Balm-water, each two drams*, give it at one Draught, and prepare another for the next morning, and so continue till he be cured

We mentioned a Drink like this in the Cure of the scab, which must be continued thirty daies together also.

You may use more or fewer purgers in the Decoctions of Guaicum, and Sarsaparilla, Senna is best and safest, and Hermodactyls which is not to be omitted when there are pains, as is shewed in the Cure by Guaicum alone.

There are also Decoctions with Hellebore, as in Melancholy Diseases, and the like, good for the Pox, if often used, or if they be too violent, every other day, and let the day of rest be for Cordials, Antidotes and good Meat and Drink; which must be observed in other violent purges.

The chief Decoction with Hellebore is this. Take *the Bark of black Hellebore six drams, of the five kinds of Myrobalans, each half an ounce; Senna and Polypody, each one ounce; Sowthistle one handful, Chipps of Guaicum four ounces*: boyl them *in eight pints of Water, and a pint and an half of white Wine, strain and sweeten them with Sugar, and Cinnamon, and Cloves, let him take three or four ounces as it worketh.*

Another Decoction or Infusion of Hellebore for the same, mentioned in the Scab, is good here.

Or this: Take *the Barks of black Hellebore powdered, one dram or four scruples*: boyl it *with Whey or other Decoction, and give it strained with syrup of Fumitory, and syrup of Roses*, use it often.

Wine wherein only Hellebore is infused, will do the same without Decoction; or if you make a Wine of the Grapes of the Vine that hath black Hellebore growing at its Root.

A famous Chymical Emperick cured the Pox with this Electuary, giving it morning and evening fifteen daies, if the Patient be strong. Take *Guaicum bark four ounces, of the Wood of the same, of Ebony, Oak, or Box, each six ounces; Sarsaparilla six ounces, Hermodactls four ounces, Turbith two ounces, Cloves two drams, Anise-seed one ounce, Sassaphras three ounces, Senna six ounces, Water nine pints*, let them stand a day or two in the hot Embers, strain them, and then pour on as much more water, then boyl them till the third part be consumed, strain them, and let the first Infusion of this be mixed with this Decoction, by Evaporation made with a gentle fire, to the form of a Syrup, and add *clarified Honey four ounces, the Powder of Sarsaparilla, Senna, and Hermodactls, each half an ounce; Turbith, Jalap, each three drams; Cloves one dram, Extract of scammony two drams*: make an Electuary, *the dose is one dram and an half, to two or three*, and let the Patient while he takes this, drink the Decoction of Sarsa, China, Hermodactls, Anise-seeds, Cloves and Guaicum.

Pills made of Quick-silver, or Mercury precipitated, or made red, are here used, which taken but twice or thrice, by violent purging cure the Pox, but we intend to speak of Mercurial Medicines by themselves. Divers other purges often taken do the same, as Electuaries, Pills and the like, mentioned in Diseases of long continuance, especially those with which the Body must first be generally purged, as Extracts of Senna and Rhubarb &c.

While you purge, give by Intermission, things that strengthen the Heart, Stomach, Liver, and Brain, especially when you use violent purges, or apply things outwardly to the Heart or Stomach if weak by purging, as we shewed in fainting.

There are Antidotes against the Pox, which are also good against other venoms, either given alone or with other Restoratives. Those we before mentioned to be given after other Purges.

If the strength fail in the use of the Apozemes mentioned, one day in the week or two or three as need requireth, give these. Take *Tormentil roots one dram and an half, Dittany two scruples, Citron seeds, Carduus, and sorrel seeds, each half a dram; all the sanders one dram, shavings of Ivory, or Unicorn one scruple, Pearl prepared half a scruple, red Coral half a dram*: make a Pouder, mix *two drams, with Conserve of Roses, Citron bark candied, Conserve of scabious, or Cordial flowers one ounce, and with syrup of Bugloss*, make an Electuary; let him take the quantity of a Nutmeg, and drink Balm, Scabious, or Carduus water and wine after it.

In cold and weak Persons, add to this *Pouder, Cinnamon, and Cloves, each one scruple, Mace half a scruple, Conserve of Rosemary flowers, and of Acetus, each one ounce.*

You may make Lozenges of the same, some give purges one day and another the Decoction of Bugloss and Wormwood, and so continue.

When you use Decoctions and Infusions of Hellebore every other, or the third day use the former Cordials, or this following which is good after all strong purging. Take *the thick Juyce of sowthistle two drams, scordium dried one dram, Citron seeds half a dram, Mithridate or Treacle half an ounce, syrup of Citron barks as much as is fit for an Electuary.*

Mithridate and Treacle are given alone after purging, when we fear a Dysentery, Flux, to prevent it, as I shewed in Dysenteries.

The Pox is usually cured with Quick-silver, so called, because like silver, and Hydrargyrum, because it flows like water, and by the Chymicks, Mercury, it is used inwardly or outwardly.

Outwardly, we observe it cureth ordinarily, but by what quality or force is the doubt, although at that time we also dispose the Body for sweat, yet it is uncertain, whether sweating is not then provoked by the silver; and although they spit after it very much, by the particular force of the Quick-silver which nothing else will cause, yet the question is whether the spitting cures the Pox, it seems to cure for these reasons, because the Cure is not without it be

be raiſed, and becauſe there comes Inflammation, Ulceration and ſtink in the Mouth and Teeth, which is thought to come from the Venom of the Diſeaſe, and not from the Quick-ſilver. And beſides its manifeſt power to flux, it cureth it by a ſecret Vertue, as it doth other Infections as Itch &c. and by a propriety contrary to the Venom of the Pox; for which it ſeems the Antidote.

It is not needful to ſearch out for a manifeſt quality, as Heat or Cold by which it acteth, as great Men have done, and how it worketh, becauſe we ſee that by its ſecret qualities and proprieties it doth it when nothing elſe will, neither doth its Operation demonſtrate any other. Nor muſt we omit the uſe of it, becauſe of the accidents it produceth in the Mouth or the like, as Convulſions which are moſt to be feared, when it is abuſed; for the Mouth is eaſily cured, and if it be rightly uſed, you need not fear Convulſion. And we ſee many miſtakes in other Medicines, as Sweats and Purges, when they are not rightly adminiſtred.

Moreover the Cure of the Pox by Quick-ſilver, is either with it crude or alive, or fixed or mixed.

Of the crude we make an Oyntment to cure the Pox, which is called the *Neapolitan Oyntment*, becauſe the Diſeaſe was called *Neapolitan* comming from *Naples*. Theſe are made with Greaſe, Butter, Oyl, Roſins and Gums, that the Quick-ſilver may ſtick the better to the Body, ſo mixed that you cannot ſee the Quick-ſilver not killed, but all looking blew when it is right, they mix alſo therewith things that make the skin thin, and open the Pores to make it penetrate or pierce, and to prepare for ſweat, and to digeſt that filth in the skin. The quantity is two ounces of Quick-ſilver with one pound of the reſt, and ſomtimes half Quick-ſilver if the Body be ſtrong, and you may uſe more or leſs as you pleaſe, according to the Conſtitution and its Operation.

This general Oyntment is the beſt. Take *Quick-ſilver two ounces, either crude or killed, with Juyce of Lemmons, or faſting ſpettle, freſh Hogs greaſe tryed, with the third part of Hens, Ducks, or Gooſe greaſe, or Butter, ſix ounces, Roſin waſhed in Aqua vitæ one ounce, Powder of Maſtick, and Frankincenſe, each one ounce; Oyl of Bayes two ounces, Oyl of chamomil, Dill, Lillies, or Roſes one ounce, with a little Wax* make a Liniment. Firſt mix the Quick-ſilver in the Mortar with the Roſin, and then add the Greaſes, and after the Oyls in which the Wax is diſſolved, and then the Pouders.

To make it ſweet ſented and to correct the greaſie ſent thereof, add one dram of Oyl of Spike, or more for it will make it pierce, ſome leave it out, becauſe it diſcovers the Pox in the Patient that ſmells of it, being ſtrong and known to be uſed. Liquid Storax gives a better ſent, and diſſolves more.

They mix Treacle and Mithridate with this Oyntment to reſiſt Venom, the quantity of half an ounce, but to what purpoſe I know not, for it will neither mix with the greaſe nor is it good outward, but inward.

When there is pain in the Head and about the Bones, make it thus: Take *Quick-ſilver, Greaſe, Roſin, and Gums as formerly, with the Marrow of Veal one ounce, Oyl of Orris, Wall flowers, Worms, or Foxes, or Bayes five ounces, Pouder of Orris, Hermodacts, Bay-berries, each one dram; Euphorbium one ſcruple, with Wax* make an Oyntment.

For ſcent and piercing, add Oyl of Spike, Storax, and Labdanum, and to pierce more, half an ounce of Oyl of Turpentine, or Petroleum which is not accepted by ſome for the ſcent.

Others, to make it better for the Nerves, boyl the Juyces of Rue, Dwarfe-elder and Sage in the Oyls till they are conſumed, and add Aqua vitæ and Wine.

If there be Puſtles and Ulcers, add dryers, and if the Oyntment be too dry and hinder ſweating, uſe them not but after openers, they are thus made. Take *Quick-ſilver, Greaſe, Roſin, Gums as formerly, Oyl of Bayes, of Bricks, each two ounces; of St. Johns-wort one ounce, Myrrh half an ounce, Lythargе and Ceruſs, each two drams; Wine aſhes half a dram, with Wax* make an Oyntment. You may uſe Oyl of Juniper for Oyl of Spike, and Juyce of Fumitory, Docks and Briony boiled in the Oyls.

It will be excellent, if you add *Cinnaber, or red Lead two drams, or Verdegreeſe one dram, or Sublimate, one dram.* Theſe are ſafer, as in particular Unguents ſhall be ſhewed, when they are applied only where there are Ulcers and Puſtles, and not daub'd all over.

They mix ordinary Greaſe one pound, and two ounces of Quick-ſilver, or in pains the four hot Oyntments, Dialthæa, Martiatum, Aregon, and Agrippa, or Enulatum and the like in the Scab.

Another. Take *Quick-ſilver two ounces, Frankincenſe, Maſtick, each half an ounce; Hogs greaſe, Butter, each four ounces; Oyl of Bayes four ounces, Salt one ounce and an half, Allum burnt, and Tartar, each half an ounce; Aqua vitæ one ounce,* make a Liniment, and in Ulcers add *two drams of each of Ceruſs and Lytharge.*

Some make an Oyntment of Quick-ſilver, the four hot Oyntments and Oyls, with Treacle and Mithridate, pouder of both Hellebors, wild Cowcumbers, Euphorbium, Verdegreeſe, and they confeſs it cures not all.

Others make it of Sublimate, or Cinnaber, with Brimſtone, Greaſe, Roſins and Wax, and Aqua vitæ, but it is not ſafe.

Others make it with Quick-ſilver and Greaſe alone, or Vine aſhes. Others of Quick-ſilver, with Turpentine, and Aqua vitæ, all theſe muſt be uſed warily.

The uſe is thus, let the Patient be anointed naked in a warm Chamber at the fire, Hands and Feet in the palms and ſoles, and up the Back-bone, under the Arms, and in the Groins, not touching the Breaſt or Head, and this done once or twice a day morning and evening, or one day once, and the next day twice, as the ſtrength requires. When thus anointed, you muſt wrap him in warm cloaths, and put him into a warm Bed, and let him ſweat while he is able; and if he ſweat not, freely uſe bottles of hot water or pillows, filll'd with hot Peaſe to keep the heat, placed at the Feet or under the Arms, or Bricks, let him ſweat an hour and an half or as long as he can, and then wipe him, and change his Linnen, and after he is up and hath walked a little, let him eat, let him do thus eight or ten daies, leaving when he begins to ſpit, and if he do not ſo in that time, make the Oyntment ſtronger with Quick-ſilver, or anoint ofner till his Mouth be ſore, which you muſt after cure, and look to him till his Ulcers, Pains and Puſtles be gone, and then to cleanſe him for the remaining filth of the Oyntment, put him into an hot Houſe, and waſh him with Lye, and bring him by degrees into a temperate Air.

Let him keep in hot Air, and uſe Diet of good Nouriſhment, moderately. A little Wine is allowed to the weak when ſtrength fails, and Wine and Water for others, or three pints of water, boiled with two ounces of Guaicum.

Let him firſt have a general purge and bleed if need require, for when the Body is cleanſed the Cure will proceed the better, and between his daies of Oyntment uſing let him purge if he be coſtive: As we ſhewed in purging.

The curious people uſe theſe Oyntments onely to ſome parts, as the Joynts and Back-bone, but then the Cure is long and not alwaies certian.

Others anoynt only the Palmes and the Soles of the Hands and Feet, and this is leſs troubleſom, and leſs perceived if they wear Gloves, eſpecially if they walk abroad, as they may in warm weather, and excerciſe, which is good for ſweating, and when they return home they may ſweat further and uſe other things.

Theſe muſt have more Quick-ſilver in them then the other.

There are alſo Plaſters of Quick-ſilver to Cure the Pox. Or Sear-cloths uſed ſeldom but by ſuch as have the oyntment, becauſe filthy, and requires more ſtricknes, and deſire the Plaſter, becauſe they have more freedom, but this if flower, and muſt be uſed longer, and with more Quick-ſilver. And if they neither ſpit, nor have ſore,

Mouths, you must provoke them with Oyntments, and Fumes afterwards, and so the Plaster doth well to prepare.

These are made of the same things, that the Oyntments are made, with half an ounce more of Quick-silver, with Cinnaber and Sublimate by some, with Wax for a Cerat, and Rosin for an Emplaister, spread upon Leather, or by way of Cere-cloth.

Or they take other Gum Plasters, as Ceroneum[c] Melilot, Zachary, Diachylon, with Orris, and put as much, or more Quick-silver as to the former. There is another Plaster of Quick-silver, by *Vigo* called the Emplaster of Frogs, which are therein, which is applied to the parts pained, and may be used generally with more Quick-silver and Euphorbium which hath, besides Quick-silver, Hogs-Grease and Vipers grease, Turpentine, Frankincense, Euphorbium, Storax, Wax, Oyl of Chamomil, Dill, Lillies, Bayes, Spike, of Saffron or Juniper, juyce of Dane-wort, Elicampane, Wine, Mother-wort, Stechas, Schœnanth, Litherige, Frogs, Worms. The use is, spread it upon Cloth or Leather, and lay them to the places you use to anoynt, as the Hands and Feet, and Emunctories and to the Back-bone; tie them on, and wear them day and night, and renew them every third or fourth day, and labor to Swaat every night, continuing till the Mouth is sore. Let him purge and Diet, as when anoynted, and because the Cure is longer, they may have liberty to Ride, or go abroad somtimes; with their Plasters on.

These do somthing, if but applied to the Hands and Feet. Let them therefore were Gloves and Socks to conceal and keep the Plasters on. And because they keep company they are less mistrusted. This in tender Bodies and long continuance will do the Cure. We use also for the Cure of the Pox, not only crude and running Quick-silver, but fixed, either with Brim-stone or Vitriol.

You must boyl Quick-silver with Brim-stone, til it come to a red clod, which they call Cinnabar; because their artificial Cinnabar is like the natural, by which name they also cal red Lead. Thus prepared it is used for curing the Pox, not by anoynting, as when it is Crude, but by the Smoak of it, when it is burnt to Fume the Body. For this Artificial Cinnaber keeps still the force of Quick-silver, and when it is burnt by reason of the Brimstone, it hath a greater and more peircing fume, or smoak and works as strong as Quick-silver when it toucheth the Body, and causeth Salivation or spetting and a sore mouth, and Cures the Pox. And therefore our Chyrurgions use it more then the Unction, or if there be any relicks after another course hath been taken, this will clear remove them. They mix things to correct the stink of Cinnabar, when they raise these Fumes, which they powder and lay upon the Coales; or they mix Cinnabar with Rosin, or the Infusion of Gum Traganth, and make Troches thereof, which they lay upon the Coales to smoak. Observing this quantity, that's one dram of Cinnabar be used at a time.

This Fume is made for eight times. As,

Take *Cinnabar one ounce, Frankincense alone or half Mastick three ounces;* make *a Pouder, use half an ounce at a time,* or mix it *with Turpentine which makes a great Fume, or with Gum Traganth* make Troches for eight times.

To make them sweeter. Take *Cinnabar one ounce, Frankincense, or Mastick one ounce and an half, Benzoin six drams, Storax half an ounce, Labdanum two drams, Wood Aloes or white Sanders half a dram:* make *a Pouder, let him use half an ounce at a time.*

You may add other sweet Gums and Spices, as Cloves, Cinnamon, Nutmeg and the like.

In Ulcers you may add to the second pouder prescribed half an ounce of Myrrh, and Amber, and when the Ulcers are very malignant, you must use very strong dryers, as half an ounce of Antimony, two drams of Brass, or Venice Glass one dram.

And somtimes strong, if the Party be strong, as *Orpiment one dram, Quick silver prepared, otherwise a sublimate or præcipate one dram,* with this Caution, that they take none of the Fume into their Nose.

Some suppose that they can resist this Venom in the Oyntments and Fumes by mixing of Treacle; but in regard the strength is lost by burning, as it will do little in Oyntments, so we suppose it is good for nothing in Fumes.

These Fumes are thus administred: the Patient is put naked into some warm close place, which is kept from the Air, as a hot House, or a Tub for the purpose, which beneath of wood and above covered with a Mat or the like, arched a Tent. Thus sitting let him take the Fume which comes from the Troches thrown upon the coals there, with his Face out, that he may endure it longer, but his Head so covered that the Air come not at it, but towards the Conclusion, let the Head be a little fumed also; let him sit while he can endure it without fainting and sweat. Then cover him with warm sheets, and carry him to another place where there is no smoak; not too far off, least he catch cold, there put him into a warm Bed, as we said in Unctions, to sweat while he is able. There is another way of smoaking for the Pox, for gentle Folks, with less trouble: if you do it against a Chimney covered with Tapestry, and so the Smoak will get up the Chimney, and the Patient breath the better. And the best way is to lay the Patient straight in his Bed, and conveigh the Fume by a spout from a Funnel or fuming pot under the cloaths unto his naked Body, and there they keep it, with his Head out of the Bed, till a little at the last as we said before.

These Fumes are to be used once every day, and if the Patient be weak every other day, or if he grow faint, let him rest some day till his Spirits be recruted, and to it again till by his fluxing, or spitting or soreness of Mouth, you are admonished to give over, which usually will be after ten times, somtimes sooner, and somtimes later.

The Diet is the same with that of Unction, but they must eate oftner, because Fumigation weakneth more then Unction and Abstinence cannot do so much good here, as weakness will do hurt; you must also purge somtimes, as in the Unction.

Quick-silver made into Sublimate, with Vitriol and vinegar, which flyeth up, and sticketh to the Head or covering by the force of the fire is used outwardly, also for the Cure of the Pox, mixed with some Liquor to wash the ulcers; for Quick-silver is in the Sublimate, and sticks to the Body, and doth the same that it did in the Oyntment and Fumigation, and cures the Pox by spitting, which also maketh a sore Mouth as the other. And moreover by the sharpness of the Vitriol, it burns the skin, and blistereth it, and draws out the venom from the sore and knotty places. Thus they cure the Pox by it alone, and take away the Pains and Nodes, and root them out when no other way will.

For making this Mercury water of Sublimate, a middle quantity is one ounce of Mercury to two pints of Liquor, and you may increase or decrease the quantity according to the Operation.

By Decoction you may make it thus: Take *of Sublimate Mercury one ounce, common Water, or Rose-water, Scabious, Fumitory, Marjoram, or Sage-water &c. two pints, white wine four ounces. or Aqua vitæ two ounces:* boyl them a little and keep them for use.

An Infusion for a Water to wash with. Take *Sublimate one ounce, Allum one ounce and an half, Lytharge, and Cerus, each one ounce; Aqua vitæ two pints:* steep them in a close stopp'd Glass.

A Decoction. Take *Sublimate one dram, Arsenick four drams, Euphorbium half a dram, Rose-water or the like, wish Aqua vitæ, each twelve ounces:* boyl them a little in a Glass.

Thus we use these Waters, let the Legs be washed with a clout dip'd in this Water from the Knee downwards, and the Arms from the Elbow foreward, sometimes, morning and evening by the fire, continuing it ten daies, till the Mouth be sore and they spit.

Let

Let the Patient be governed as in the Unction in a hot place sweating, and taking proper Meat and Drink, and let him be purged before, and in the time of using it.

Also Experience hath taught, that Quick-silver taken inwardly cures the Pox, either crude or calcined.

When it is taken crude, it doth it by the same way, as when outwardly applied, causing no other manifest Evacuations, but spitting, neither will it cure without it make the Mouth sore. And in regard, it doth the same externally, it is thought prejudicial inwardly; give it not rashly therefore but in an old Pox, or when others fail, or to save Labour and Charge. And it is safer, when it staies not long in the Body, for being crude, it commonly gets out soon by its weight and slipperiness, or usually some other things are mixed to carry it away: and so it hurts not the Stomach and Guts, and leaves its strength notwithstanding.

We give crude Quick-silver from six to eight or ten grains, with something added to dissolve it, and to carry it away; for of it self, it will not cause stools, it is made into pils and so given every day till there be Heat, and stink in the Mouth with spitting, which must continue thirty daies, and the Cure is compleat, if general Purges went before and a good Diet with it.

You may make these Pills thus: Take *of crude Mercury half a dram, kill it with Juyce of a Lemmon or Sage, or of Roses, or with Syrup of Roses, or with Turpentine, add the best Agarick two scruples*, make three Pills, let him take every night after Midnight, one, and repeat them till the signs aforesaid appear, Rhubarb is given instead of Agarick: some mix one or two grains of Opium to the Composition, to take away pain, and provoke Sweat. Sometimes Musk and Ambergreese, or a drop of Oyl of Cinnamon, to refresh it by it scent. Also because Gold is good against the Venom of Quick-silver, and to make them dearer, they use to guild them.

Another Composition. Take *Aloes one ounce, Rhubarb or Agarick two drams, Mastick one dram, Quick-silver killed with Turpentine two or three drams, with Syrup of Roses solutive*, make them up, adding the aforesaid Spices, give one scruple at a time, or more if the former work not.

We make these Pills stronger, by adding strong Purgers, which take away spitting, they are given every day, or every other day, and Treacle between.

They are made thus: Take *of the Pills mentioned of quick-silver, Rhubarb, Agarick, and Mastick*, add to the *Scammony, or Coloquintida prepared two drams, give half a dram at a time.*

Or thus: Take *Cochy and fœtida Pills, each half an ounce; Rhubarb, and Agarick, each one dram; Quick-silver killed with Turpentine three drams, with syrup of Roses solutive*, make a Body for Pills, let him take *one scruple or half a dram.* as they work.

Mercury calcined called Precipitate, is given to cure the the Pox so called, because it is precipitated or thrown down into the bottom of the Glass by the fire, or because it moveth the Belly downwards. And then it doth not work by its Natural force, as when crude, but by an acquisite or new gotten Vertue, by which it stirs up Nature so violently to stool; and not to spitting: and that not as other purges in a long time, but quickly given but twice or thrice, causing aboundance of vomiting and purging, sometimes sweating and urin, so that they are cured, as by a Miracle, but not without danger.

The way to prepare it, is as followeth. Take *Quick-silver two ounces, Aqua fortis three ounces*, let them stand a day or two in a Glass, till it fall to the bottom like chalk, pour off the Liquor by degrees till the bottom is dry: or draw off the Moisture by Evaporation upon the fire, or boil them to a hardness, pouder that which remains, and put into a Crucible or melting pot upon the fire for an hour, stirring it with a stick, till it be calcined, and made like red Lead, this they call Precipitate,

Take it and infuse it in Rose-water, Plantane, Scabious or Bettony-water at a gentle fire, till all the Water be gone and the pouder remains dry, then calcine it in a Crucible: this pouder must be mixed with Conserve of Roses, or of Apples or the like, and a Pill as big as a Pease thereof given in the morning; others add some Cordial or Stomach pouder; others Treacle, and Confectio Alkermes.

Some work with more pains to rectifie it, that it may do less hurt: first they wash it in hot water, then they boyl it in Vinegar four times distilled, three or four fingers above it, in a close Glass for four hours, then they pour off the Vinegar, and boyl it again in new, the third time also, then they distil the Vinegar that was thrice poured off, and after the vineger is gone, they take that in the bottom which is like Salt, and boyl it in Rain-water, and when it is settled, they pour off the clear top, and distil it in *Balneo mariæ*, till the Liquor be gone, and keep the remaining Body, and this they use as the safest precipitate.

Others take more pains, and steep it in Spirit of Wine, and still with a retort, and then dry it to a red Pouder it. One grain of this in wine doth wonders in the Pox, say the Chymists.

Some give Pills of precipitate, with Rhubarb, Senna, Scammony, or Hellebore, Saffron, and Starch, with Juyce of Lemmons, and give every day one

I thought fit not to omit that famous Medicine of the Chymists called *Bezoar mineral*, for curing the Pox, it is thus made. Take *Antimony, and Sublimate calcined with Vitriol very white, and let it be thrice finely pondered, of each as much as you please*, first ground by themselves, and then together, and draw out the Oyl by a Glass retort with a gentle fire, by degrees increased, separate the coagulated Mercury as much as you can. Take four ounces of this Oyl, and pour upon it three ounces of Vitriol by drops, which will make a great Noise, still them in sand till they are dry, fortifie the Spirit with one ounce of fresh, do thus thrice and the Mercury will be fixed, calcine this in the fire of Fulmination, and it will be very white, and it must be sweetned with spirit of wine, often poured on and drawn off. this is Bezor mineral, keep it in a glass and give two or four grains at a time. These are not to be used rashly because dangerous, and when all things fail, nor must all know them. And when we use them we must refresh them with things internal and external, and we prevent the Flux, Dysentery: as we shewed in Dysentery.

The accidents of the Pox are divers wayes cured.

The pains about the skin, bones, shoulders, head, and fore-head, with the Nodes, if they continue after the cure fully administred and trouble the Patient, must have peculiar Remedies; and if they help not, you must begin the Cure again, the Remedies follow.

If after the general Application of things, there remain any accident, it may be removed by the anointing of the part with the common Oyntment mentioned in the Pox, and if you add Wax thereto, you may make a Plaister for the Fore-head, and use it like a Cap or the like, constantly.

Or use the Plaisters mentioned, or Cerots to the particular parts, or that called *Divinum* or *Gratia Dei*, or of Bettony with Quick-silver, adding Euphorbium, Castor, Hermodactyls, Orris, Pellitory, Hellebore, and other hot things for the Joynts, especially that usual Emplaster of *Vigo* called the Plaister of Froggs, excellent for pains and Nodes or Knots.

Also that Cerot which we mentioned for curing of Nodes.

That excellent plaister which I have found so successfully, is thus made. Take *Quick-silver three ounces, mix it with Turpentine washed in Aqua vitæ one ounce, Hogs grease or Calfes Marrow, each one ounce and an half; Oyl of Lillies, Chamomil, Dill, Bayes, Worms, or Foxes, each half an ounce; Oyl of Spike, or Turpentine two drams, Euphorbium, Frankincense, each half an ounce; Storax six drams, Hermodactyls two drams, Castor one dram: with Wax*, make a Cerot. They say the Oyl of Guaicum allayeth the pains.

Wash the Legs pained with Mercury-water, it is the best

beſt for Pains and Nodes, as is mentioned.

Some ſay that Fomentations and Oyntments of things without Quick-ſilver will allay the pain, being temperate and anodine, or takers away of pain, or heating much the Nerves. But we have ſhewed that actual and potential heat doth increaſe theſe pains, except Quick-ſilver be mixed.

Beſides it is good to purge often with Pills, Potions, and the like, mentioned in the Gout and Head-ach, which alone ſomtimes takes away the Reliques of the Diſeaſe, and with other Medicines to the part they are more effectual, eſpecially if you give between, things that ſtrengthen; and if the Head ake, give peculiar Medicines therefore.

Sweating alſo by Decoctions mentioned, doth take away the after pains, eſpecially with purges and Medicines to the part. Stilled Waters are the beſt for it, as that of the Decoction of Guaicum, or that of Treacle, mentioned in the general Cure given in Potions.

Narcoticks or Stupefactives are ſometimes given to aſſwage pain with good ſucceſs, becauſe they alſo bring reſt and cauſe ſweat; and they may be taken without hurt. Therefore Treacle is ſo good to cauſe ſweat and aſſwage pain, and the reſt that ſtupefie, called Narcoticks.

The Nodes or Swellings in parts without fleſh, as the Fore-head, or Head, or Shins, or Backs of the Hand, depart when the pox is cured; and if it be by Unctions or Fume the ſooner, becauſe they are anointed with the other parts, but if the Cure be by internal things, and the Knots or Nodes remain, you muſt cure them by Unction and Fumigation, and the whol Diſeaſe is not perfectly cured, adding more Oyls and Gums, and Greaſe to the Oyntments.

The Emplaſters mentioned are good for theſe, eſpecially that of Vigo, which ſoftneth and conſumeth them.

Or this Cerot. Take *Gum Ammoniack, Opopanax, each two ounces; diſſolve them in Aqua vitæ, Gooſe greaſe, Hens or the like, each one ounce and an half; the Marrow of Veal, or Goats bones one ounce, Labdanum, Storax, each two ounces; Storax liquid one dram, Powder of Hermodactyls, Orris, each three drams; Cinnabar one dram, Quick-ſilver diſſolved with Turpentine ſix drams, with Oyl of Worms, and Wax,* make a Cerot.

Or boyl *Briony roots, and Orris roots in Wine, to half a pint,* ad *Gum Ammoniack, Galbanum and the like diſſolved in Aqua vitæ to three ounces, Liquid Storax, Bears greaſe, horſe Marrow, each one ounce; Quick-ſilver kill'd with Turpentine two ounces:* make a Plaiſter.

Or take black Briony roots, and fill them made hollow with precipitate, keep it in a moiſt place, then take out the Mercury, and anoint it with the Juyce of the Root.

Mercury water is good againſt Nodes to waſh as mentioned, eſpecially when it raiſeth Blyſters as it uſually doth and burns the skin, and this is done by adding more Mercury, or ſome Arſenick, as we ſhewed.

That Froath which is skummed off at the boiling of guaicum, doth diſcuſs the Nodes, if it be often uſed.

You may uſe the ſtrongeſt of thoſe Remedies which were preſcribed for taking away other Nodes, as we ſhewed in tumors, eſpecially thoſe of Quick-ſilver.

And the Stupefactive Roots and Herbs will do good applied, as is ſhewed. As Briony roots bruiſed and applied without Quick-ſilver, doth wonders.

Some boyl Rhubarb and Aloes in one part of Lye, and half a part of Soap, till it come to a Plaiſter with Wax.

Alſo they foment the Nodes which ſoftning Decoctions, mentioned in Scirrhus, and Knot-gout, and other hard tumors.

A Bag filled with Oats, and boyled, and often applied hot, is accounted good for the ſame.

The Nodes are cut out if they will not away, but hinder the Patient, as we ſhewed in the Cure of other Nodes. And if they be not near the Joynts or Nerves, as in the Head, or if their be fear that the Bone is foul, they may be burnt with an actual Cautery, and if the Head or Shins be infected, ſo that the Bone will not ſcale, you muſt take it out with a pair of Forcipes or little tongs, if the skin of the Brain appear, you muſt defend it with red ſilk or fine linnen before you lay a Plaiſter to the Ulcer, and cure it as a Head-wound.

The Ulcers external and internal that come in the Pox, if they be ſmall are cured with the general way, but if they be fixed and filthy, they muſt have a particular Cure, leaſt they infect the parts adjacent and the Bones, and it muſt be ſpeedily adminiſtred after the general.

In the external Ulcers of the Face, about the Noſe, Lips, the Privities or Fundament, you muſt firſt cleanſe them if foul, and if hollow apply Incarnatives, and then heal them up if the Bones be foul, they muſt be ſcaled. As I ſhewed by Remedies mentioned in the Cure of malignant ulcers, where theſe are comprehended, and in the general Cure of foul Bones by actual and potential Cauteries.

Chiefly in the Ulcers of the Pox, they which contain Quick-ſilver, Sublimate, or Precipitate, or Cinnabar all made thereof are the beſt, becauſe they are contrary; as I ſhewed to the Diſeaſe, ſuch as is preſcribed in the Cure of Ulcers. beginning thus,

Take *Quick-ſilver one ounce, Turpentine &c.* and that following for the Ulcers of the Legs.

Or that made of others there mentioned, as Apoſtolorum and the like, adding *four ounces of Quick-ſilver, with half an ounce of Turpentine diſſolved, or one dram of Sublimate, or precipitate:* or mixing equal parts of the general Oyntments for the Cure of the Pox, and for the Cure of Ulcers together, or another there mentioned, good againſt Puſtles and Ulcers, this may be uſed to the Ulcers after fluxing &c. as we ſaid there, if the Ulcers be filthy, Cinnabar, Verdegreeſe, and Sublimate muſt be added, and if you fear the Bone is foul, add one ounce of Myrrh more. And if the Bone be foul, add ſix drams of Euphorbium, which will take Scales that are rotten from the ſound Bone.

The pouder of white Hellebore roots, Agarick, Senna added, alſo do cure thoſe perverſe Ulcers.

Oyl of Guaicum is commended above the reſt, alſo of Antimony, of Bricks, and Juniper.

They alſo teach that the Foam, or Skum ariſing from Guaicum boiled, cures theſe Ulcers.

Other internal Ulcers in the Pox, although as we ſaid of external, they muſt have a general Cure, yet it is good in the time of the cure, and after if they continue to apply particulars to them. Which differ not much from them that are uſed to other Ulcers which are in the ſame places without the Pox.

For in the Ulcers of the Noſe which are internal, we proceed as we do in other Ulcers of the Noſe, by ſternutations, or Errhins ſnuffed up, or pouders. Among the reſt they are not proper which are made of the Decoction of Guaicum, Cinnabar, and Sublimate, the Fumigation of Cinnabar cureth not onely the whol Body, but alſo the Noſe, if taken: as we ſhewed.

In the Ulcers of the Mouth as the thruſh, Fiſſures, and Excoriations, whether they come from the Pox, or after the uſe of Quick-ſilver, thoſe which are declared in the like Ulcers, in the pains of the Mouth and Jawes, are here alſo very convenient. Among which ſome are mentioned, which are proper for the pox, which have treacle in them.

The Ulcers in the Fundament of both ſexes, and in the Privities, as thoſe called *Condylomata*, require the ſame cure, which is mentioned in the pains of thoſe parts.

If the Ulcer be in the Yard of a Man and Neck of the Bladder, or in a Woman, ſo that it cauſe burning, and corrupteth Urine, we ſhall ſhew the cure thereof, when we ſpeak of piſſing of matter in things caſt forth, and in the infectious running of the Reins, which goeth many times before the pox.

The Inflammation and Puſtles of the Mouth uſually following the uſe of Quick-ſilver is cured, as we ſhewed in Diſeaſes of the Mouth with Oyntments of Greaſe and Milk. And there we ſhewed, how they are to be cured, when they follow the uſe of Quick-ſilver, as other Inflammations of the ſame parts, and how thoſe Medicines that have

have treacle therein are to be adminiſtred, and if they turn to Ulcers, of which we now ſpake, how they are to be ordered.

We cure all Spots and Puſtles by curing of the Pox, for if the Pox be rooted out, by divers purgings, as we ſhewed, they will be gone, or if they remain, you muſt begin the Cure again with outward Applications, and they will take away the Reliques. But when the pox is gone, the puſtles remain fixed, you muſt cure them with the ſame remedies that we preſcribed for red puſtles, if they be ſuch or venemous, by cleanſing, conſuming and burning them off.

And becauſe quick-ſilver doth powerfully take away the accidents of the pox, you muſt uſe the general Oyntments made thereof.

And you muſt mix them with the particular Oyntments mentioned in red Spots.

Or apply Quick-ſilver and Greaſe, with Turpentine or Roſin.

Or mix quick-ſilver well, after waſh'd with Juyce of Lemmons or Docks, with Ceruſs, Frankincenſe and Maſtick for an Oyntment.

Or, Take *Quick-ſilver one dram, Lytharge two drams, maſtick half a dram, Camphire one ſcruple, Turpentine one dram, with Oyl of Eggs: make an Oyntment.*

And if you add a little Sublimate, it will be better.

Or uſe the Waters, Mixtures, or Unguents made of ſublimate, mentioned in the Cure of red and infectious Spots.

But if you will add the firſt, apply gentle Remedies, uſe the Topical Medicines there mentioned, or that Oyntment of burnt Allum, Aloes, Juyce of Oranges, or Docks, with Oxymel of Squills.

Or the Emplaiſter of Lilly-roots, roaſted and beaten, with Sugar, and Camphire, or Oyl of Tartar to anoint.

Some cure with Baths in the time of the Cure by Unction, and they uſe the Bath after Supper, and the Unction in the morning. The Bath is made of ſuch things boiled, as were mentioned for other Puſtles, as Docks, Scabious, Fumitory, Lentils, Lupines, black Hellebore, Brimſtone and the like: but theſe will not do except the Diſeaſe be quite taken away: therefore theſe and the like Baths are to be uſed at the Concluſion, to waſh away the Reliques of the Diſeaſe and Itch of the Oyntments; but it is better to uſe a hot Houſe or dry Bath.

If Clefts continue in the Hands and Feet after the cure, it is a ſign that ſome Reliques remain, therefore the cure muſt be repeated by the Unction, or you muſt anoint the palmes of the Hands therewith, and the ſoles of the Feet.

Or *diſſolve half an ounce, of Quick-ſilver with two ounces of either of the four hot Oyntments, or with the of Turpentine, or with Greaſe and Turpentine, and a dram of Sublimate, and anoint the Clefts.*

Or mix the pouder of Sublimate, with Oyl of Violets, Almonds, or with Pomatum, ſo much as may not corrode, or with Allum, Borax, and Camphire.

Or boyl Sublimate in water, and touch the clefts therewith, or uſe thoſe Remedies preſcribed in Diſcoloration for the cure of fiſſures and clefts, and of the peeling of the skin, there you may find Medicines which are here proper alſo.

Where we alſo ſhewed, how the clefts muſt firſt be waſhed before they are anointed, with an emollient Decoction, to which you may add Docks, and Fumitory or the like to cleanſe.

Scales in the Hands, if they remain after fluxing may be cured by the ſame means, or by the Remedies mentioned in that Diſeaſe with the pox, in the Chapter of Deformity.

And if Dandrough remain after fluxing, you may uſe the Remedies mentioned there for the cure thereof.

The falling of the Hair from the Head or Face, as Eyebrows and Beard, ſhewing this kind of Pox, or mixed with other accidents, is commonly cured in general with the pox, by purging and the like, and it is not needful to treat thereof in particular, but if it be left after the Cure, you muſt either renew the cure again, if you conceive the pox not gone, or elſe apply Medicines mentioned in the Falling of Hair. Among which thoſe which allay the ſharpneſs of Humors, which corrodes the Roots of the Hairs, are good to prevent the Falling off, and when they are fallen off, you muſt take away the Cauſe thereby: as we ſhewed.

Oyntments of quick-ſilver may do here good, as in other accidents left after the general cure; but becauſe they are not convenient for the Head and Face, you may uſe other things without quick-ſilver, and that is the beſt which we mentioned to be made of Cantharides, or Spaniſh Flies, and Oyl of Spike.

Other accidents and Symptoms of the pox are to be cured, of which theſe are the moſt uſual following.

The decay of ſtrength from ſweating or purging over much, is cured by ceaſing from Evacuations, till ſtrength return; and by refreſhing the Patient with reſtoring meat and drink, and ſtrengthening Phyſick inwardly and outwardly, mentioned in the defect of vital Spirits, ſuch alſo may be uſed to fortifie the Patient in the time of Evacuation. But if they faint away in the Cure, and ſwound, then you muſt recal the Spirits by divers Applications. All which and how they are to be uſed, are preſcribed in the Defect of vital Spirits.

If the Flux Diarrhœa or Dyſentery come from much purging, you muſt cure them with Remedies mentioned in theſe Diſeaſes. Among which Narcoticks or Stupefactives of Nature, as treacle and the like, are very good to take away pain and not hindering ſweat: as was there ſhewed.

The Cure of the Scurvey.

The Scurvey though it come alſo from a venemous Cauſe, yet it may more eaſily be cured then the pox; and if it be neglected or evil ordered, it turns to a Dropſie or a worſe Diſtemper.

Experience hath taught that the total and perfect Cure of the Scurvey, is by Evacuation and things that alter by manifeſt or ſecret Vertue, contrary thereunto, by which alſo the cauſe is taken away, and the Diſtemper amended.

We muſt evacuate thoſe Humors which we perceive chiefly to abound, and becauſe that Melancholy is thought the chief, which is in the Meſeraick Veins about the ſpleen or in the ſame, they ſtudy to evacuate that onely, by bleeding, purging and ſweating.

They bleed, if the Body be full before purging, in the Arm and Hand, on the left ſide, ſomtimes in the Foot, eſpecially in Women when the courſes ſtop. Alſo the opening of the Hæmorroids is very profitable.

After a Clyſter or the cleanſing of the Guts from Excrements, and Blood-letting if need be, we prepare the ſuperfluous Humors and evacuate them. And becauſe they are Melancholy, you muſt prepare and purge with the ſame things, that we uſed for the pox, as therein at large is mentioned. But you muſt not continue ſo long purging as in the pox, but only at firſt ſomtimes, repeating them. To which Remedies you muſt add things that open Obſtructions, eſpecially in the Bowels and Spleen which are the occaſion of Melancholy, therefore you may uſe the remedies preſcribed to prepare and purge Melancholy, and to open Obſtructions mentioned in other Diſeaſes of Melancholy; and they will be more fit here, if you mix thoſe things that alter, and are properly enemies to this Diſeaſe.

Sweating is good in the Scurvey as well as in the pox, but it muſt not be of ſo long continuance, but after purging, now and then, in a morning in the Bed, or in a hot Houſe, if ſtrength will permit. Therefore the Decoction of Guaicum, Sarſa, and Saſſaphras, and the reſt mentioned in the pox are good. Or we may give treacle or mithridate, or which is better, the thick Juyce of Dwarfe-elder, Elder or Juniper, adding to three ounces of theſe one ounce and two drams of Syrup of Poppies, or give the ſtilled Waters mentioned, in the altering Medicines.

We use things that alter the maglignant Distemper of the Scurvey, which are by a secret propriety contrary thereunto.

Some Plants which are sharp, which Experience teacheth have a propriety against the Scurvey, among the which Scurvey grass is the chief, a sharp Herb like Water-cresses, this all men conclude to be the Antidote against it. Whether it be eaten in Sallads, or made into a conserve with sugar, and eaten often: or the Juyce be boiled to a Syrup and so taken, or it be boiled in Milk, or Wine or Ale, and drunk constantly, or the distilled Water thereof.

Water-cresses are judged to be of the same Vertue, taken as Scurvey-grass, or with it.

Brook-lime also is good though it be not so sharp.

Wild Purslain also, or great Stone-crop which is a little biting, may be added to these.

Also the Herb, and especially the seed of Mustard, which candied with Honey like sweet-meats, is excellent, not only for the Cure, but the prevention of the Scurvey.

There are divers other things that correct the Distemper at the first in the Liver and Spleen, by opening Obstructions, which are mentioned in the like Diseases of Melancholy in the form of Decoctions, Syrups, Infusions in Wine, distilled Waters, Conserves, Electuaries, Powders, and Tablets, and Pills made thereof.

Which are made of these following, which are openers of Obstructions, and good against the spleen, the five opening Roots, Avens, Restharrow, Elicampane, Rhubarb, and Monkes Rhubarb, the Leaves of Fumitory, Thyme, Epithymum, Polypody, Bugloss, Germander, Agrimony, Tamarisk, Celandine, Burnet, and bitter things, as Gentian, Squills, Hedg-hysop, Wormwood, sour things, Sorrel, Wood sorrel, and of the hotter Medicines for cold people, as Bettony, Mints, Sage, Rosemary, Stœchas, Organ, Hysop, Mugwort, Rue, Bay-berries; also of Spices, as Nutmeg, Mace, of Minerals, as Vitriol, Steel, Iron, Bezoar-stone, and the like Cordials.

As for the Symptoms of the Scurvey, the Tumors and Ulcers of the Guns, you must use such Remedies as in the Diseases of the Gums, drying Waters, with such things as are properly against the Scurvey, as Decoctions of Scurvey-grass, Brook-lime, Water-cresses, or the Waters, or Juyces thereof.

Also the Juyce of Oranges, crude and boiled, especially in the filth of the Gums to wash and to drink inwardly.

Also Lapis prunellæ or Salt-peeter prepared, mixed with the things mentioned, or with Sage, Self-heal, Privet-water or the like, is an excellent Remedy for the Ulceration of the Mouth and Gums, approved by Experience.

If there be Ulcers in other parts, the like Medicines are to be applyed.

The spots in the Leggs and elsewhere, because they vanish when the Disease is cured, require not a peculiar cure, and if any remain after, use the Remedies against spots in Discoloration.

If after accidents be, as Contraction or Resolution of Members, or Leucophlegmacy or a Dropsie, you must direct your Cure at that, and proceed as we shewed in the like cases in Motion, Hurt and Tumors.

CHAP. V.

Of Consumption of the Body.

The Kinds.

WE call that a Consumption when the Body or any part thereof is consumed or decayed, for if they grow leaner, we spake of that in Deformity, when Magnitude is diminished: also when the internal parts are consumed, as the Bowels, Liver, Spleen, Kidneys without Corruption, as hath appeared by Anatomies, as also it may be found in the Lungs, Heart, and Brain: we have spoken thereof in the Hurt of the great Functions. But of outward Consumption whereof we here speak. There are two sorts, one when the whol Body, another when any parts thereof is wasted or consumed.

Leanness or Slenderness.

Somtimes the whole Body consumed in thickness, and not in length, which seems to be increased; in some there is a falling away or Leanness; and if it come from want of Nourishment it is *Atrophia*, as shall be declared in the Causes, but if the whole Body or the greatest part consume it is called *Tabes*, and then the Temples of the Face fall in, and the Eyes, and the Nose grows sharp, such a Face is called *Hippocrates* Face, because he so described it, also the Cheek bones stick out, the Mouth keeps open, except the Beards of Men keep them from being perceived. In the Breast all the Ribbs are visible; and the Grissle like a sword between them is bent, the shoulder blades are like wings, and the Channel bone like a bow, under which there is a deep pit, and they stick out, the Back bone is plainly seen, but the Belly is fallen down and seems empty except a Dropsie follow, the Neck is slender, long and unequal, and the external Larynx or Bone called *Adams apple* is visible, the Buttocks are lank, the Hipps fleshless, the Coccyx or three lower bones is like a Tayl, the Legs, Arms Hands, and Feet are lean and withered, and they seem swollen about the Joynts, because the adjacent flesh is lost, the Nails grow longer and at length crooked; sometimes the Roots are so consumed, that when they grow again, the hinder part grows lower. and there is an Impression as it were dividing the Nail as across, which also grows away; the Hair being dried at the Roots falls away: the Skin lanke, wrinkled, foul and dry: in which the Veins are to be seen blew.

Thus in sound Men otherwayes you may perceive leanness or Atrophy, or Tabes which is to a total Consumption as they who want Food, or are worn away with labour and care or with age, lean, dry and withered.

In sick people the Consumption is most usual, and is a Symptome of divers Diseases, especially of acute and lasting Diseases, which consume the Body, and when the recovery of the Body repaireth; somtimes they are all their lives time lean, and seem old, when not, therefore it is called *Senium* or age-like.

Senium or Age-like.

When other Diseases last long they consume the body, and that is *Tabes* which hath many Symptomes accompaning it, as a Cough, and then it is called *Phthisis* or Corruption of the Body, or the Ulceration of the Lungs, from the cause that shall be mentioned; and in this kind of Consumption there is a cough night and day, and spitting sometimes with Blood mixed, and at first pure Blood, and in great quantity, as we shewed in spitting of blood, which cometh by fits, and there follows matter stinking, white, or yellow or green, or black; somtimes a piece of the Lungs is spit up with the matter, and there is a constant hectick Feaver, with a small Heat and a quick Pulse, as in Feavers mentioned, which causeth shortness of Breath upon little Motion, and coughing, these continue many months and years, and brings the body like a Sceleton or Anatomy of Bones covered with skin.

Phthisis or Corruption of the Body.

Empyema or matter in the Breast.

There is another accident to this Phthisis or Phtisick which is called *Empyema* or Suppuration, when matter is in the cavity of the breast, like the Ulcer of the lungs by the signs; but sometimes it appears by a flowing of Matter at the side, and more certainly when there is a Node between the Ribbs, which being pressed flies in, and then returns, if these signs go before those of a Phthysick will presently follow.

This

Marasmus or Withering. This Consumption with a Hectick Feaver is called *Marasmus*, from the decay rather then from the Feaver, there are three sorts thereof, when it begins, increaseth, or is confirmed, and this is called *Marasmus Feaver*; when it is at the height of the Body, is so lean and withered that the Grisles bend, especially in the Breast, and sides and stick out, the Skin is rough, the Nails crooked, and the Hair falleth.

The Colliquation or Melting of the Body. This Consumption of the Body is joyned with another kind of Hectick Feaver, which comes from the burning Feaver, and this is called *Colliquation* or Melting, because it lasteth not long, but is sudden and short: as we shewed in Feavers.

Atrophy joyned with Cachexy or evil Habit. Somtimes there is a decrease or consumption with other accidents mentioned in the Cachexy, as loss of complexion, a pressing pain at the Heart, as there is a Swelling of the Body: and this called *Atrophy* or want of Nourishment, which may be called a kind of Cachexy, because decreasing it causeth an evil Habit, although evil Habit or Cachexy, is rather when the Body is increased then decreased. The practick Physitians describe this Atrophy under the Diseases from whence it comes, as those of the Liver and Spleen, and comprehend that Consumption in the Names of those Diseases.

Atrophy with a Dropsie. Besides this Atrophy joyned with Cachexy, there is another joyned with the Dropsie and its Accidents, by which though the Belly and Feet swell, the upper parts are extenuated, and grow lean, so that the body is partly swollen and partly consumed, miserable to be beheld: as we shewed in the Dropsie.

A particular Atrophy of a Part. Sometimes some Parts consume, and that is called *Atrophy*, which is a kind of Consumption, this is usual in the outward Joynts or Members, as about the Hip, Foot, Thigh, and Calfe of the Leg, where it is more visible; or upon the shouder or Elbow, or between the Thumb, and fore-finger.

The Atrophy or Consumption of the Eyes. Besides these, the Eye is said to have an Atrophy or Phthisis and not the Pupilla, when it is not exactly distended and filled, and seems less and obscure and the little black is more straight and contracted, this contraction of the black is mentioned in Hurt of sight: and thither may this falling of the Eye be referred rather then the Consumption thereof, which is in the thick Tunicle.

The Causes.

The Cause of total or particular Consumptions is of the parts when they are soft, fleshy and fat, these consume sooner then the hard, as Bones, Grisles, and Membranes, which manifestly decrease not, although while a man lives their Juyce and Humidity may consume, and they may wither. Hence as it is that fat or flesh being consumed, their places are empty, and the bones are only covered with skin. This unevenness is most in those places where there are more and greater Muscles, as the Temples and Cheek, when the jugal bone sticks out, when they are fallen, and there is hollowness of Eyes, when the Muscles and Fat of the Eyes are consumed, and when the Muscles in the Neck are consumed, or in the Breast, Back, Belly, Buttocks, there are void places, and cavities and bones stick out, as the back-bone, Ribbs, Throat, Grisle, Shoulder-bladds, Channel-bone, and the crupper-bone or Ilium, and when the Muscles aregone from the Arms, Legs, Calves, Fingers; the places are naked and depressed, and the Bones seem to stick out, especially the Joynts, and the Nails, which some say increase in a Consumption, unless Nature being content with a little Nourishment for them as I said of Bones, should keep them growing all the life. As when the whol body is consumed, the Hair grows except by the force of the Disease the Roots dry up, and they so fall off. In Grisles there is no sign of Consumption, but that being naked they stick more out, as the Nose is sharper, and the Nails, which only of all Cartilages come forth of the skin, are crooked in a great consumption. As for the Membranes, of the skin which is only visible, makes the body even, and if the flesh and fat under it, and keeping it out be consumed, it grows wrinkled and dry as I said, and obscure from the wrinkles that cast shadows, and the Veins are naked, because of the fat consumed, the cause of the Consumption of these parts is the want of nourishment or substantial radical Moisture, or the change of the Temperament.

The want of Nourishment when blood is either not, or unprofitable, is the cause of every Atrophy. If the Body grow lean for want of Nourishment, it is called *Atrophy*, in which the parts wanting their Juyce of nourishing blood, grow lean, in regard instead of the substance lost there is no new, especially flesh which requires more Nourishment then other parts, and being soft is sooner consumed, but the harder parts, as Bones, Grisles, Membranes consume not, because they are nourished with little, and are more firm, as we see the bones of dead Men last long. This want of Nourishment is from divers Causes, and first because it is not bred, or it is unprofitable, or it is hindered.

When the Bloood is not sufficient, then because the Juyce nourishing the parts faileth, and the fat continually decaying is not renewed by the like, the body consumeth, this is from want of Chyle in the first concoction, when found men have too little Food, or sick men too little Appetite, which causeth decay as well as the Disease. And this may come from other Diseases of the Stomach, as want of concoction, when there is little or imperfect chyle, as in the Tympany, those parts which are not consumed. The body is extenuated from the want of a second concoction, when the blood is not made, this causeth an Atrophy, this is from the fault of the Liver or Spleen, as weaknes &c. When a Cachexy or Leucophlegmacy from their actions diminished, or from their actions lost, so that there is little or no blood; also other Diseases of the Liver or Spleen breeding a Dropsie Ascites, may cause an Atrophy therewith, where the parts above not swollen like Feet and Belly are consumed, these are described in the cause of the Dropsie.

The blood is unprofitable and unfit to nourish, if it be foul, not crude, which causeth cachexy and Leucophlegmacy but impure, then it breeds Leanness or Atrophy, which is joyned with Cacochymy; and if it be watery it gets the Atrophy with the Dropsie Ascites: this is from the first concoction which is not mended in the second, or in the third, as we shewed.

The want of Nourishment, from blood hindered is the cause of the Atrophy of a Part. When the blood is stopped from a part it hath an Atrophy, this comes from an outward cause, for the internal from want of blood would cause Leanness of the whole body. The blood is hindered from distribution by the Veins stopped and pressed, by the Dislocation of some Joynt, as the Hip; from which follows often an Atrophy of the Legs, and sometimes Numness, if the Nerves be pressed with the Veins. Also when Members are too long bound, or if the Veins are straightned by a Callus, Tumor, Node, or Wenne, about the Joynts, or cut off, especially if the great Veins or many be so cut off, for the lesser Veins, and few being cut, there are others to nourish the part. And if the great Arteries be cut off, there will be Mortification rather then Consumption.

For

The want of substance making Juyce is the cause of Consumption or Tabes.

For the want of Substance making Juyce and of Natural Heat, the Body consumes, and that somtimes through age, for as the body grows thereby being young, and flourisheth thereby in middle age, so in old age as that decayes, the Body consumeth, through the drineſs of the parts also which comes by their Temperament, whereby they are withered.

The same may come from Labour, Care and Diseases, being vehement and perseverıng,whereby the radical moisture and Natural Heat is consumed and weakned, as in old Age, so before by Labour, and Cares and Diseases, Men become sooner weak and lean, and so continue all their lives, except the Natural Heat be not so weakned, but it may be repaired. And then, though they be very lean, yet if they leave off Labour and Care and grow sound, they will recover their former Vigor. –

The change of the Constitution into hot and dry is the cause of Marasmus.

It happens through the change of the Constitution into a more hot and dry temper, when all the parts are of a like temper ; that the Body doth not increase in young Men, and in the aged it decreaseth, and groweth dry and withered. As in a Hectick Feaver, coming from the heat of another Feaver, which changed temper of the Heart making it too hot and dry, the Body consumes of a Marasmus, as we shewed in Hectick Feavers.

And though it is by degrees in this kind of Hectick, yet is it of a sudden in Colliquation or melting,and it follows a burning Feaver, the extream Heat whereof, did not onely turn the temper of the Heart into hot and dry, but melted the substance whereby the whol body became dry and consumed : As I shewed in the melting Feaver.

The Ptysick is caused by the change of the Constitution into hot and dry, and a Hectick Feaver.

This is not only in simple Hectıcks but in such as are joyned with a Distemper of the Lungs, so that the Body consumes as in a Hectick, and this is called *Phthisis Ptysick*, because the Lungs distempered are the cause of it. This Consumption rising from a filth and Rottenness of the Lungs, doth continually disturb the Heart adjoyning by Heat, and makes it, and the whol body hot and dry, which causeth a Hectick Feaver ; as other Hecticks come from other Feavers : as we shewed in Feavers. The first Cause of this Rottenness of the Lungs, and the Hectick that comes from thence, and the Consumption that follows that, is the Ulceration of the Lungs, till they rot, so that the Lungs are in part or all one side turned into matter, and the Vessels of the Heart which are joyning to the Lungs, are lost on that side, and as it were cut off about the Heart, and a Callus at the Root, And this Corruption hath been so great that the Mediastinum that divides the Lungs, and the Pericardium or Case for the Heart have been infected thereby.

Matter in the Breast is the Cause of Empyema.

These things being thus ; the matter which breeds in the Ulcer of the Lungs, is not only spet out, as it falls upon the Branches of the rough Artery, but at length when the substance of the Lungs is divided by corruption it fals into the Cavity of the Breast, and there being heaped up it causeth the Disease called *Empyema*. This appears to come from the Ulcer, by Anatomy, for when there is corruption of the Lungs, you shall alwaies find some matter in the Breast. As also in regard, that matter coming from the Suppuration of the Membrane that compasseth the Breast, fals seldom into the same, for it will rather sal out of it, as was shewed in the Pleurisie. But an Impostum, growing to the Membranes, or to the outward Tunicle of the Lungs being broken by other Causes then Inflammation, may send its matter into the Breast : or matter may flow thereunto from without ; as they say may be from an Angina suppurated, or Squinsie, or from a Defluxion of Flegm into the Breast. But in regard there is no passage from the Neck into the Breast, and if they should get into the rough Artery, except they were coughed up they will rather fall into the Lungs then the Cavity of the Breast, this is not probable to come from a Squinsie much less from a Defluxion. But if an Empyema should breed without an Ulcer in the Lungs, after the manner mentioned ; the Lungs would at length be infected by the matter retained in the Breast, and the Ulcer of the Lungs would follow, which usually goeth before the Empyema,or matter in the Breast.

The solution of continuity in the Lungs is the cause of Ulceration.

The cause of this Ulceration, and the rottenness that comes from thence, is either Inflammation or breach of some Vessel in the Lungs, or a Wound, or corroding of the substance by some sharp putrid or venomous Humor.

In a *Peripneumonia* or Inflammation of the Lungs, or in the Pleurisie, if the blood, as we shewed in the Pleurisie, be not turned into matter by Concoction, and so spet out : But the inflamed substance of the Lungs is also supurated, there is an Exulceration of the Lungs which usually follows such Inflammations, in which there being more matter, which is thrown out by coughing, in great quantities. And this matter, except death prevent, corrupting the substance of the Lungs, more, begets that lasting Ptysick, joyned with a Hectick Feaver in which the Body pines away. If either in the beginning or afterwards, any matter falls into the hollow of the Breast, there will be also an Empyema, as *Hippocrates* shews, if Men in a Pleurisie be not purged in fourteen daies, they wil have a Suppuration or Empyema : And this will sooner come from the Pleurisie and Inflammation of the Lungs, then from the Membrane that goes about them, because a true Pleurisie, as I shewed, comes from the Inflammation of the Lungs, as well as *Peripneumonia* or Consumption of the Lungs.

This comes often from the breaking of a Vessel in the Lungs which passeth through the substance of them being ful of Blood, and then the Blood being spet from the Vessels into the branches of the rough Artery there is coughing up of blood at the first which goes before the Ptisick, and shews that it comes from the breaking of a Vein. Because there is a Wound made in the Lungs by the breaking of the Vein, which by the continual Contraction and Dilatation of the Lungs seperating the Lips thereof cannor grow together and be healed but turnes into a filthy Ulcer which corrupteth the substance adjacent of the Lungs and causeth a Hectick Feaver, and a Consumption, somtimes the cause of this Rupture of a Vein in the Lungs, is too often and vehement Dilatation thereof, by hollowing, crying and blowing, or straining in lifting, or carrying of burdens, or in voiding of Excrements, or Child-birth. Somtimes from other external force, as a blow or fall if the Breast be so bruised that the Lungs are hurt. As we shewed in the causes of spetting blood.

There is also an Ulcer in the Lungs often, from an external cause, either from a Contusion of the breast breaking the Vessels and substance of the Lungs which causeth a contused Wound, or from a thrust into the Breast which toucheth the Lungs, and causeth a wound, both which turn into Ulcers.

Somtimes the cause of a Ptysick or Consumption, is a sharp humor flowing from the Brain which corrodeth the Lungs and this they suppose to be the chief cause, but it is not, in regard many who have a long time had this Defluxion and Cough, yet have no Consumption, and young men fal into Consumptions rather then old who are more troubled with Defluxtions. Yet if we grant that a Ptysick may come from a Defluxion, which causeth a Cough, and the Cough the breaking of a Vein, because by forcing often the inner parts of the Lungs, they may be hurt in time. And that Defluxions may easily befal Consumptive men, which though they do not first hurt the Lungs,

Lungs, yet by reason of the Cough which is added to that which proceeds from the Ulcer, they cause an increase of the Disease. But we suppose it more often comes from an humor ulcerating the Lungs, which lieth in the substance thereof and there corrupteth, and is not coughed out, but often recruted. Because (being bred in the substance of the Lungs and not getting into the branches of the rough Artery, and less provoking a Cough then when it fals from the Head upon the rough Artery) it may continue longer, and do more hurt. They teach that the Lungs may be infected with blood or matter, and so a Ptysick may come; and because in the Disease of spetting of blood, the blood is not sufficiently discharged, it putrifies and hurts the Lungs and so causeth a Ptysick. But this comes rather from a broken Vein as we shewed, and when the blood out of its Vessels, lodgeth and corrupted. And if the blood comes not from a broken Vein in the Lungs, but fals down by the rough Artery there upon, (except it be coughed up again (as it is usually) and lodgeth (which is difficult) then putrifying it may also hurt the Lungs. In the Inflammation of the Lungs in the Pleurisie and *Peripneumonia*, the blood that sweats through or matter that breds thereof, if it be not sufficiently coughed out but retained in the Lungs, it infecteth them, and causeth a Ptysick which follows a Pleurisie, or *Peripneumonia* that is inflammation of the Lungs not well expectorated or coughed up. And that matter in their ulcerated and Corrupted Lungs continually increasing, and sticking to the Ulcers, makes a greater corruption.

If the Lungs be ulcerated from any venemous humor, as is written of a Sea-hare, that eaten, it will ulcerate the Lungs, if it be true, it is from its quality contrary to the Lungs.

The Cure.

It must first be general of the whol Body, and then perticular to certain parts thereof.

The general Cure of the Consumption of the whol body, is to be as it is in found men and sick.

The Cure of Atrophy or Leanness.

In found men that have no other infirmity the body through fasting and want of nourishment, hath an Atrophy sometimes: or from labor and care which dry up the natural moisture, and then you feed them moderately again and they abstaine from violent labor, and cast away care, they recover of themselves, except they be very far spent, and then they are incurable. Neither can leanness in old Age, when the substance making moisture is consumed and the Members dried, be more cured then old age its self.

The Cure of Atrophy joyned with Cachexy & Dropsie.

That Atrophy which is from the disease of the Bowels ordained for sanguifying or making Blood or Chyle, especially the Stomach, Liver and Spleen, through the want of Nourishment which is caused by those Diseases, by which means either blood not sufficient or unfit for Nourishment is bred; requires that Cure which belongs to those Diseases which being cured, the Body flourisheth, and if not the Patient dieth. The cure of which we have shewed in other great accidents that come from the same: as in the Cachexy whereof Atrophy is a Species or Kind, and in the Dropsie and the like accidents that come from the Diseases of these Bowels, joyned with Atrophy. In all which because of the Consumption of Body, it must be nourished with good Juyce, often choosing the best that are prescribed in a Hectick Feaver and Ptysick, and such as the weak Stomach can digest. Therefore if the Appetite be dejected, that they take little, let nourishing Clysters be administred. Such as we taught in Hectick Feavers, or Milk, Yolks of Eggs, and Chicken-broath, also Broath of other flesh, and Juyces, or Gellies, or stilled waters, cream of Barley and Wine.

If a Marasmus follows a Hectick Feaver caused by the change of the Complexion too hot and dry.

The Cure of Marasmus or withering & Colliquation or melting of the Body.

We shewed the Cure in the Hectick Feaver called *Marasmodes*.

As also we shewed the Cure of Colliquation or melting from a burning Feaver in the cure of the melting Feaver. The Consumption or Ptysick which comes from a Hectick Feaver through the Ulcer of the Lungs, which also changeth the constitution, shall here be treated of.

The Cure of the Ptysick from the Ulcer of the lungs and Empyema.

The Solution of continuity in the Lungs, is scarce united when they spit Blood; and therefore cannot be kept from an Ulcer. And if it be in the substance of the Lungs, and they spit filth and matter, the cure is very hard to be done: and it is desperate if the Lungs begin to corrupt, and to be turned into matter and to corruption causing an Empyema in the Breast. The constant motion of the Lungs causeth this difficulty and impossibility, which hinders the wound from growing together: also the cough that comes from that matter, or from a Desluxion which more and more stirreth the Lungs. Besides, because Medicines for the Lungs can scarce come thither with their least part, they can do little in the breaking of a Vessel, or an Ulcer. Moreover the Lungs corrupted cannot be repaired, and that Corruption which falls through and turns to an Empyema, in the Breast, can very little be coughed up. And though it should be let out by cutting, yet the Ulceration of the lungs remaineth, without which the Empyema could scarce have been there, as we shewed. But if an Empyema come without the ulcer of the Lungs, from some Imposthume in another part, as we said, except you presently make way for it by cutting, (which may cure the Patient, if it be certainly from that Cause) it will corrupt the Lungs by continuance, and bring the same Danger.

In regard we must leave nothing unexperienced, we must take the Cure in Hand, foretelling the worst; and we must begin at the Disease that is the Ulceration or corruption of the Lungs with the matter and cough, and the collection of matter in the Breast, if there be an Empyema, then we must regard the Hectick Feaver and Consumption. Then the causes, namely the Desluxion which causeth or nourisheth the ulcer, and increaseth the cough. As for the other cause that is the breach of a Vein, which is known by spitting of Blood: we shewed in spitting of blood the cure thereof.

We give somthings which though they can come but in a small quantity to the Lungs through the rough Artery, yet are good against the Ulceration, Corruption, Cough and Collection of Matter. They are cleansers, such as are good for other Ulcers, which purge the Lungs and inward parts of the Breast from matter, and provoke coughing; which are good also in an Empyema, without the Ulceration of the Lungs. Then we give astringents which by a drying and emplastick Vertue, do as much as may be glew and unite, the substance of the Lungs divided, as follows.

Milk being cleansing by its Whey, and glueing by its cheesie part, is chiefly used for the cure of this Ulcer, and because the Butter therein doth also loosen and diminish the cough; these it doth given with Sugar, or plentifully drunk to repair the consuming Body: as we shall shew.

Water and Honey, twelve parts of Water to one of Honey, is good for an ordinary Drink to cleanse the Ulcer; also Water and Sugar or Ptisans of Barley and Figs, stilled water also is good to dry an ulcer.

Some commend a Julep of stilled Waters, of Parsley-roots, Fennel, Marsh-mallows, and Elicampane mixed and boyled with Sugar: adding while they boyl a little Gum Traganth, Arabick, or Juyce of Liquorish.

There are also Syrups for the cure of ulcers in the Lungs, as that of Myrtles, which are slimy, glutinating and astringent; also the Syrup of dryed Roses and of Quinces.

Or make this following, which is fittest. Take *the Roots of Comfrey, and Liquorish, each one ounce and an half; of Marsh-mallows one ounce, of Brank Ursine, or Birthwort, each half an ounce; the Leaves of Plantane, Betony, Lungwort, Coleworts, Colts-foot, Shepheard purse, each one handful; the Flowers of Roses, Violets, each one pugil; of the four great cold Seeds half an ounce, of the four small cold Seeds, and Line-seed torrified or parched, each two drams, Water-cresse seeds torrified one dram, red Pease one pugil, Myrtle-berries two drams, Jujubies, Sebestens, each six pair; Raisons stoned ten pair:* make a Decoction, adding *Honey and Sugar, each four ounces:* boyl them to a Syrup, of which let him take a little often. The Decoction of the Oak of *Jernsalem* is commended against spitting of matter.

Or, Take *Comfrey roots three drams, Juyce of Colts foot and red Roses, each one ounce; Juyce of Liquorish, and of Sloes dissolved in the aforesaid one dram and an half, Gum Arabick and Frankincense powdered, each one dram; Water and Honey four ounces, Penidyes or Sugar pillets, of Roses, each two ounces; Syrup of Jujubes and Myrtles, each one ounce and an half;* to these you may add *Juyce of Scabious, and Juyce of Plantane to heat.*

The things that are licked called *Eclegmata*, or Electuaries taken now and then, or Tablets or Troches, which are held in the Mouth till they dissolve, which are good against the Ulcers of the Lungs, are made divers wayes.

Of these usually, as Diatraganth frigid, Dipenidion without Species in Tablets, also Sugar of Roses in tablets is excellent, and the Conserve of Roses often taken. Also the resumptive Electuary without the Species, and the Lohoch of Poppies, which doth assuage the cough of those mentioned in the Cure of a cough, some are more thickning, and by their glueing quality are good against ulcers, as those of Mucilages, and that of Turpentine of the Larch-tree.

These following Pouders will cure, if possible, the ulcer and corruption of the Lungs, either given with Sugar of Roses penids or with Milk, or with Sugar dissolved in convenient Waters made into tablets, or with Syrups into Lambitives, or mixed with Electuaries.

The first is: Take *Comfrey roots two drams, Marsh mallow roots and Liquorish, each one dram; red Roses two scruples, Gum Traganth, and Arabick a little parched half a dram, Starch one dram:* make a fine Pouder.

Another: Take *Red Pease, Line-seed, and Quince-seed parched a little, each one dram; Plantane, Marsh mallows, Mallows, Purslain and Cotton seed, each half a dram; white Poppy seed one dram, the four great cold Seeds two drams, Pomegranate flowers one scruple, Frankincense, or Mastick and Amber, each half a dram.* Make a Pouder, use it alone or with the former.

You may add burnt Ivory or Crabs eyes and coral, each one dram, or if you will glutinate more, Bole or sealed Earth.

They are counted better though less pleasant, with Fox Lungs, and Windpipes dried one dram, Ashes of cray-fish half a dram; also the Pouder of Snails dried, and of weezles Lungs. If he spit Blood still, you may add one scruple of white Henbane seed.

For spitting of matter, use the Roots of Clot-burre, or Moon-wort, the Leaves of Bettony, *Dioscorides* gives winter-cresse seeds; others the Leaves of Elm, Pauls Bettony and Scabious, with the former Pouders.

This Electuary is Excellent. Take *Conserve of Comfrey roots one ounce and an half, Conserve of red Roses one ounce, the Infusion of Gum Traganth in Plantane water one ounce, Coral, Bole or Earth of Lemnos, each one dram, Conserve of Sloes half a dram, Saffron half a scruple, Syrup of Myrtles* as much as will make an Electuary.

These tablets following are pleasant and profitable. Take *red Rose flowers without the white*, dry them, and pouder them finely, sprinkle it with Juyce of Lemmons, and with Sugar boyled in Rose-water, make tablets.

Or, Take *Sugar dissolved in Rose-water, and with Juyce of Roses* make Tablets.

Or, Take *four ounces of Sugar dissolved with Juyce of roses* and boyl it, add at the end *the species Diapapaveris and Diatraganth frigid, each one dram; Conserve of Comfrey roots half a dram:* make tablets.

Troches to be held in the Mouth. Take *Rosin of the Lark-tree, or Turpentine a little boyled, and powdered, Frankincense, each half an ounce; Myrrh, Sanguis Draconis, or Pomegranate flowers, each one scruple; Saffron half a scruple, Comfrey roots two scruples, Sugar of Roses one ounce, with the Infusion of Gum Traganth in Colts foot water:* make Lozenges.

Brimstone infused in Plantane, Coltsfoot or Rose-water, or the like to give it a scent twice or thrice, given in a rear Egg in pouder, or with Sugar, is good for this, as for other Diseases of the Breast. The Chymists give the flower of Brimstone by making it whiter; chiefly with Salt-peeter fixed mixing one part of Salt Peeter, with two of Brimstone which shineth, and subliming it in the fire according to Art with Sand. Salt Peeter is fixed with Sulphur even as Lapis prunellæ is made. Also they think that sulphur waters drunk, do good.

There are also Fumes that dry the Ulcers which are received at the Nose or Mouth, and drawn into the Lungs by the breath, which way they can best get thither.

The Fume of a Decoction mentioned in the cough, which must be taken hot into the Mouth is good.

The best Fume to dry, is that of the Roots and Leaves of Colts-foot burnt, and of Horse tayl.

Or that which is made of Henbane seed, and the like in the Troches of the Cough.

Or they that are made of Brimstone, and other things mentioned in Asthma.

Or thus. Take *Gum of Ivy one dram and an half, frankincense one dram, Myrrh half a dram, Amber one scruple, Bezoin, Storax, each half a dram, Conserve of Sloes two scruples, Coriander, Rose seeds and red Sanders, each one scruple;* pouder them, *and with Gum Traganth or Turpentine of the Lark tree:* make Troches. You may add a little of the Bark of Mandrake root, or Henbane seeds, some use a little Orpiment but not safely, supposing that Sandarach was called Orpiment, but Sandarach is the Gum Varnish.

A dry Air is better then a moist for men in Phthicks, this may dry the Ulcers.

Ointments to the Breast may do something of relaxing Ointments, that they may easily spit up the Matter, such as are mentioned in the Cough and the Asthma. And when the Matter is little, you must use astringents to heal the Ulcer, if they may reach the Lungs possibly.

As, Take *Oyl of Myrtles or Roses, and Mastick, each one ounce and an half; the Mucilage of Comfrey, and Marsh-mallow seeds, each one ounce; Line seed, or Fænugreek two drams, Sarcocol infused in Milk, Frankincense or Mastick, each half a dram; Myrrh one scruple, Rosin one dram, Saffron one scruple, with Wax* make a Liniment.

To ripen the Impostume, which being in the hollow of the Breast produceth an Empyema, to break it before it doth great hurt, they apply things to the Breast, they make Concoction that the matter may be spit out.

You may apply the great Diachylon Emplaster, or that of Orris.

If you add to the Ripeners things that draw forth then by making the skin thin, and digesting the matter, they cause a Tumor, and shew where it ought to be let forth by cutting.

For which this following is good. Take *Marsh-mallow roots, Briony and Orris, each two ounces; Figs ten pair, Dates six, Chamomil and Melilot flowers, each one pugil; Fænugreek and Line-seed, each one ounce,* boyl and bruise them, adding *Oyl of Lillies two ounces, of Peppers one ounce, Mustard seed two drams, Leaven one ounce,* make a Cataplasm.

You may apply Pitch over the Breast, if you are certain there is matter by the stretching forth and noise thereof, that the Tumor may more appear.

Injections into the Cavity of the Breast, are good when it comes from a wound without, and we have seen by the use

use thereof, and other things which are good in ulcers, one that had a Knife strook into his Lungs, and an Ulcer, so that some parts of the corrupted Lungs came forth, and the Party consumed, and yet lived a long time after. And I knew another that spit bloody Matter a long time, that by these things lived long. And in the year 1645. I saw a Scholler who had a Pleurisie evil cured, and his Breast opened for an Empyema, too low, so that all the Matter was not let out, that had abundance of Matter after, was gathered in his Breast, so that when he held down his Head, the Matter came out at his Mouth, as I often saw; we took from him the Matter, (by conveighing into the old Ulcer that was stopped a swelling Tent) with some parts of the substance of the Lungs, and we sent him home found where he is yet living.

These Injections are made of Cleansers, and after of Dryers, using some gentle things which are prescribed for other Ulcers, made of Water and Honey, Whey, or the Oyntment of Smallage, Barley water, and of other Plants.

Or make this Cleanser. Take *Whey of Goats Milk one pint and an half, Honey of Roses four ounces, Juyce of Celandine and Smallage one ounce and an half.*

Use this Injection by turns when no matter comes forth. Take *Goats milk in which Comfrey roots are boyled two pints, Juyce of Plantane one ounce and an half, Sarcocol steept in milk and dissolved one dram and an half, Myrrh one dram, Rosin of the Lark-tree dissolved in the white of an Egg one dram*: mix them.

If you are certain of the Collection of matter in Empyema, by the little Tumor between the Ribbs and the Nose, you must make Incision, for otherwayes you cannot take out the matter. And so he may be cured, if the Empyema be without Ulcer of the Lungs. And if there be an ulcer and the Cure proceed not, yet in regard that otherwise an Empyema cannot be cured, it is better in extremity to use the means, then leave the Patient, and so by shewing the matter we excuse our selves. And if we doubt of the Empyema, when we are certain of the ulcer of the Lungs, and make Incision at first, it will help the Cure, for so the matter would be better let forth then by coughing. And because Injections may be made into the Lungs, this way when Medicines cannot come other waves to them, and come forth by the same Orifice: as we shewed in the cure of the Wound in the Lungs.

This Incision is made alwaies, foretelling first the Danger, and if there be a little Tumor, thrust the Knife into the Breast there, and take the matter out, not all at once least the strength fail; if nothing appear, make the Incision above the twelveth Rib in the lowest part of the Breast, where no Muscles lye upon those between the Ribbs, so that the matter being fallen into the breast, and lying upon the Diaphragma which is joyned to the twelveth Rib, may come better forth, and the Wound is to be kept open till all be let out by degrees.

Hippocrates shews that matter may be let out by burning, with an actual Cautery, because a potential cannot reach so deep: but because it is not safe to use there a hot Iron, it is better done by Section.

The Remedies used for a Hectick Feaver with the ulceration of the Lungs, must be such as repair the lost Substance of the Body, and correct the dry Distemper thereof, and if they be also good against the Ulcer, they are the better.

Restoring Medicines in the Physick.

They which chiefly restore the Substance of the Body, and are used therefore though they have other Vertues also; are either such as are administred inwardly or outwardly or injected.

Things are given inward, as Nourishment onely, or as Medicines.

They which only nourish are good to restore the Body consumed with flourishing Juyce that moisten, and correct the Driness which is procured by the Hectick Feaver; and to this end you must give things of easie concoction, that breed good Juyce, that are quickly digested and applied to the substance of the Body. Among which Milk is preferred before all, because it doth not onely what is mentioned, nourishing the Body with its whole substance; but also by its temper and moistness, qualifies the sharpness and saltness of the Matter and Humors in the Lungs, or that fall down; and cleanses the Ulcer of the Lungs with its Whey, and binds them with its Cheese, and allayes the Cough with its Butter.

We give Cows Milk, or of Goats and Sheep, and Womans Milk to people in years, though it is not usual, and Asses Milk, in all which though there be four Vertues of which all Milk partakes, namely to nourish, mollifie, cleanse and glew, yet because one sort of Milk is better then another for some Bodies and works stronger, we shall choose that which is most proper.

Of the usual sorts of milk Goats milk is best, because it is most cleansing in regard it hath more Whey, which is best when the Lungs are ulcerated; it is taken new from the Cow, or warmed, fasting in the morning four or five ounces at first, and so increasing by degrees to eight or twelve ounces: and sometimes at night going to bed, for a month together.

You may mix it with Honey or Sugar to make it more cleansing, and to keep it from Corruption. And if you feed the Goat with Herbs that cleanse the Lungs, the milk will be better; as with the Leaves of Brambles, Willow, Lungwort, Coltsfoot, with Barley, Beans, and beaten Lentils, Fennel seed, and a little Salt and the like.

Cow milk is not much unlike Goats, in want of which it may be used, or to those that have been accustomed to it, because it cleanseth, though not so much, but Sugar will help it. And because Cow milk doth glutinate more then Goats, with its thicker part, it is good after he hath drunk Goats milk, or other cleansing milk to purge the ulcer to drink Cow milk the rest of the time after in the same order.

And that the Ulcer may better be healed, you must take it with Sugar of Roses a long time, some quench flints, iron or steel in it first, so that the watery part of Whey being consumed, it may be more glutinous; or they boyl it with Rain-water, and Roses, or Comfrey roots which are better, but these are better towards the end of the milk, taking them at the first; also Sheeps milk is good at the conclusion to glew up the ulcer.

Some give Milk without order for their ordinary drink.

Asses milk is commended above Milks that are not usually taken, and are therefore more nauseous, because it is cleansing, but by its Whey which is not most to be required in the ulcers of the Lungs. And therefore when it may be had, and the Patient affected it, it may be used in the same quantity and manner, and as long as Goats milk, because it is better.

Womans milk is chiefly commended against the Pysick, because it hath the same strength with the rest, and is also more proper to restore, nourish and refresh the Body of a weak Man, being more agreable and familiar to Nature, and is turned sooner and better into the substance of the Body, it must be sucked twice or thrice a day from a sound Woman, for a long time, as if he were a Child at Nurse. Thus I have known some cured, and that one grew not only well, but got such strength, that least he should want Milk for the future, he got his Nurse with Child.

There are other things which are of good Juyce and easie concoction which nourish a decaied body, such as are mentioned in the Cure of the Hectick Feaver, as the flesh of beasts that are young, tender and full of Juyce, hens flesh, Capons and Partridges; also the flesh of Birds, especially of the Woods; also the Brains, Stones and Eggs of some Creatures. Also the flesh of Brook-fish which is good Nourishment and moisteth more; also from Plants the Seeds of Corn, as Barley, Wheat, Rice, Oats, and shell Fruits, as Almonds, Pine-nuts, Pistacha's, and Raisons, which do fatten exceedingly.

The

The flesh of Wood-tortoyses or Snails is preferred before the rest, for the repairing of the substance of the Lungs, and moistning the Body; also the tayls and shells of Cray-fish, and the hinder parts of Froggs.

Of all which you may make innumerable Preparations for Meat and Drink. As the flesh aforesaid boyled or roasted, or minced or the like, or broath made thereof, or Jellies, or the Gravey of the Roasted; also pure Bread and Cakes, with broath or milk; also Almond bread, Pine-bread, Barley, Rice, and Oat-bread which *Galen* saies is excellent against the Ptysick. Also Emulsions which they call Milk made of those Corns, Raisons, and Grapes, also sweet Wine, and because it refresheth much, you must not take it rashly from them that have been used thereto: as we shewed in the Hectick Feaver, where we shewed some kitchin Physick for the Ptysick.

Among the which there are simple Waters distilled of Nourishment, by which the body is restored and moistned, and the Capon water is the chief, and the Snail water is highly commended, as also of Froggs, Cray-fish &c. distilled.

There are also nourishing Medicines or Kitchin Physick which resist the Hectick Feaver, and the ulcer of the Lungs, which are mentioned in the Hectick Feaver, in the form of Bread or Lozenges.

There may be others made which are both pectoral and cordial, of Diamargariton frigid, and the Electuary of Gems without the Species, also precious Stones, Pearls filed, and leaf Gold and the like, which are precious and powerful.

There are also stilled Waters of Food, to which you add these good for the breast, and to restore the strength, those they call Restauratives, because they restore the substance of the body, such as the Capon water compounded of the broath of a Capon, and the like, mentioned in the Hectick Feaver.

Or you may make this Restaurative of these following distilled. As, Take *of the musculous flesh of Capons or Hens which is about the Breast one pound, with the same flesh of Pigeons, Chickens or Partridges, of Snails taken out of their shells twelve in number, of the Tayls of Cray-fish, or hinder parts of Froggs twenty*, boyl them al *in six pints of water, til two be consumed, then put the Broath remaining into a Lambeck, with half a pound of Crumbs of white Bread, four ounces of sweet Almonds, two ounces of Pine nuts, Melons, Pompion seeds one ounce and an half, beaten and steeped in Milk; also Raisons and Figs, each four ounces; Comfrey roots and Liquorish, each one ounce and an half; Orris and Elicampane roots, each half an ounce; Colsfoot and Plantane, each one handful; Cordial Flowers of each one pugil; Gum Traganth, Frankincense powdered, each two drams; Amber one dram, Bole or other fat Earth, two drams, Spikenard one dram, Sugar or Honey two ounces*, draw a Water for your use.

Those Medicines which you give to correct the Hectick Feaver here, may be the same which are prescribed in a hectick Feaver alone, as that Julep which begins thus. Take *of Violet water &c.* Or thus: Take *Juyce of Purslain &c.* Or the Syrup which begins thus. Take *of the Roots of Bugloss, or Purslain, or Scabious water, or the Tablets of Sugar of Roses, or the Candyes*, or that which begins thus. Take *conserve of Roses &c.* These must be used here, as we shewed in the Hectick Feaver.

Outwardly for the Hectick and Ptysick, we use baths and Oyntments for the back-bone after them, gentle rubbings, as we shewed in the Hectick alone.

And we mentioned there nourishing Clysters, as in the Cure of Atrophy, which must be used in time of necessity, when Meat is abhorred or loathed, which is seldom.

The Cure of a Ptysick with a Catarh.

These Medicines following are good against the Humor which floweth from the Head, which increaseth the former Cough, when a Defluxion and a Ptysick are joyned together.

Somtimes we purge to prevent it, and keep it from falling down, when it abounds, when otherwise in respect of the ulcer, Purges do not profit, because they draw nothing out of the breast. And if the body be very lean and weak, they do hurt, and bring danger by a Flux which is deadly in the Ptysick.

If necessity require, we use gentle things, as in the Asthma, to which there is a Defluxion joyned, as in Manna, which also cleanseth the breast, and Cassia, with the Decoction of Polypody, and Fruits, or old Cock-broath, and others more gentle, Troches, Potions, Infusions, Pills, and Electuaries there mentioned: also in the Cough that comes from a Defluxion, you may use those gentle Purges there mentioned, and things that stop the catarrh.

We give also Preparatives for the Humor that flows down, that it may be the better purged, and that, that which is already in the breast may be expectorated, if it be thin they thicken it, or make it easie to be spit up, if it be thick and fixed to the Lungs, they cut it, if it be tough, they cleanse it: which we shewed in the Cough and Asthma, how and in what form they should be used. Among which they which cleanse most are best, because they take away the matter from the ulcerated Lungs, and they which thicken, because they glew up the wound in a measure. For the stopping of the flux or catarrh, we give things that thicken, to which we add things that allay the sharpness of the Humors, and stupifie the exquisite Sense of the Jawes, and mitigate the cough, which is raised both from the matter in the breast, and the Humor flowing down: for which we declared in the Cough from a Catarrh, Narcoticks, and Lambatives, or to be licked, waters, and Pills, and Opiates, and other formes in the Asthma.

To which this following may be added, which mollifieth, and stops the Flux. Take *Mucilage of Fleabane seed one ounce and an half, the Infusion of Gum Traganth, or Arabick one ounce, Starch two drams, the Milk of white Poppy-seeds made with Violet-water one ounce and an half, Syrup of Poppies, Sugar of Roses, each one ounce.* Let him take it often, and it will be better, if a little Oyl of sweet Almonds, or fresh Butter be given therewith.

Or, Take *Starch or Sugar of Syrup of Violets candied, or Penidyes, each two drams; fat Bole one dram, Spikenard half a scruple, Henbane seeds half a dram, with the Infusion of gum Traganth:* make Troches, to hold upon the Tongue.

There are also things to draw back, and drive the Humor flowing down from the breast, as Clysters often used, which are safer for diversion then Purges.

There are also Pouders for the Hair which dry, and fix the Head, stop and consume Defluxions, or Bags; also Emplasters, and Washes for the Head; also Fumes taken into the cap and Pillows, and are taken at the Nose, such as are mentioned in Defluxions, and in the Cough, and Asthma.

The Humor flowing from the Head, is turned away from the breast by cupping-glasses to the Shoulders, and sides of the Neck; also by Ligatures, Frictions or Rubbing: as we shewed in other Defluxions.

It is necessary, if Defluxions from the Head will not stop, to revel and derive them by burning of the skin, in the Arm, Leg, with an actual or potential cautery for Revulsion; but for Derivation of the crown of the Head upon the coronal Suture; all kinds whereof are described in Defluxions of old Head-aches, and in the Cure of Impostumes; also in the cough and Asthma &c.

If a Flux of the Belly come thereupon, it must be presently stopped, for it is deadly, because it weakneth the body, and carrieth away nothing of the cause of the Disease.

In this cause increase the dose of astringents, which are given at the Mouth for the cure of the ulcer, as of bole, Terra Lemnia, Roses, and those that are outwardly applyed to the belly to be mentioned in Diarrhœa.

The cure of a particular Atrophie or Consumption of some part of the body, which is musculous, as the feet and

The Cure of Atrophy or want of nourishment in some Parts.

and Arms, by reason of the stopping of the blood from that part which should nourish them, is thus, if it comes from a Luxation or Relaxation of the Nerves, or from Ligatures long and straight bound, or from some Tumor, you must first look after them, and reduce the bone that is dislocated, and untie the bands or roulers, and the Tumors if possible must be removed by that way which is prescribed in the Treatise thereof. If this come from them by cutting off the great Arteries or Veins, or of many little ones, the way being stopped by which the Nourishment should pass, the Disease is desperate.

Howsoever we must use all means to bring the Blood more or less to the part consumed, using things that by Heat, or opening the Passages, or some other wayes do attract, and draw it.

Use Oyntments actually hot rub'd hard on, every day, a long, time till the Member seems to grow bigger, which we may try by a Leather measure, or rather of Paper for that will not stretch.

These oyntments are made of things potentially hot and opening, many whereof are prescribed in other Diseases and may here be used.

It is found by Experience that this is the best. Take *Tops of Savine, and of Juniper and Lovage leaves, each two handfuls; Chamomil Leaves or Flowers two pugils, green Juniper-berries, and black, each one pugil*; cut them, and bruise them all a little, *and with Oyl of Bayes or Lillies, as much as will cover them, fined Hogs grease, especially of a red Hog, four ounces, Aqua vitæ two ounces*: boyl them till all the Moisture be consumed, then strain them, and add *Oyl of Spike, or of Juniper-berries distilled one ounce, Pellitory roots three drams, round and long Pepper, or Ginger two drams, and Wax* make a Liniment or Oyntment.

Tops of Pine-tree, Leaves of Rue, and Nettles, and other hot things, as Oyl of Peppers, and Euphorbium, and Greases, especially Horse grease, Dogs, Bears, Foxes, and Badgers grease, and Butter, are somtimes added. And if you boyl Gray-fish, and Earth-worms there with, it will be stronger, especially if you mix with the other Pouders two drams of Euphorbium or Castor, or Pouder of Ginny Pepper, which is very burning, or half an ounce of the pouder of the Stone Amiantum, or so much Salt.

Somtimes the Juyce is taken from these Herbs, and is boiled with Oyls and Grease till it be consumed, and so is made up with other Oyntments, or the Juyce with Oyls, Rosin, and Pouders is mixed for an Oyntment.

You may make Plaisters of the same with Rosin.

Some commend the Blood of a Calfe, with Pouder of Pepper.

This Liniment is made of few things, but it is against a Consumption of a Part. Take *the Grease of a Fox, Dog or Man, which is most proper two ounces, Oyl of Earth-worms, or Toads one ounce, Philosophers Oyl half an ounce*: mix them and anoint the part warm.

Baths made of the Decoction of the hot Herbs mentioned for Oyntments, with others proper for the Parts, as Sage, and Mollifiers, as Mallows are good, if you often bath, but the consumed parts therein, and anoint them.

A Dropax or sticking Plaister laid often on, and drawn off again will attract the blood, and Sinapismus or things made of Mustard, which will attract the blood till the part be red.

It is also good to exercise and rub the Part often.

Gentle whipping often with Rodds, especially when the consumed part is stupified, may do good when other things fail.

The End of the first Book.

THE SECOND BOOK OF THE Functions, HURT of the Body.

TREATING of the FAULTS of EXCRETION, or things sent forth.

THe Faults of things sent forth or rejected out of the Body, are Symptomes of the third Kind, which are in the Excrements or thing voided; and therefore are Diseases besides Nature as well as the rest, whether Diseases or Causes thereof: of which we spake. These Faults in Excrements after they come forth of the Body, are to be seen touched, smels, tasted, and heard. And they differ in that some are wholly besides Nature, and from the Substance; others from the Quality, if they be otherwise then they ought, or from the Quantity, if they come forth more or ofner then they need, and so they become preternatural and evil. And if any thing come forth at a place it ought not, though it be not evil in it self, yet it is a Fault, and if it be also evil, it is a double Fault or Disease, as it is a preternatural Excretion.

These preternatural Excretions that are in themselves also evil, as well as in Respect of their Excretion, because they are divers: we shall first thus distinguish them. They either are such as constitute and make up the Body, or are contained therein, either from their Original, or proceeded from without.

The Excretion or voiding of Parts. | Such as constitute the Body, are parts that originally compose it, or such as after grow in it, and are parts of the childs Body; a Child preternaturally delivered, is mentioned in Abortion, and the parts constituting the Body, in the taking away of Parts: all these shall be explained together in the Excretion of Parts, Chap. I.

The flicking forth of Parts. | Some Parts that constitute the Body, do not altogether come forth but stick out: these shall be treated of in the flicking out of Parts, as the Guts, Cawle, Womb, Fundament, Eyes, Stones, Chap. II

There are divers things contained in the Body, and are bred which cause the preternatural Excretion, as Wind, Humors, Excrements, and divers Bodies following.

Efflation or breaking of Wind. | There is a preternatural Excretion of Wind, by Breathing, by a Wound, by Snotting, Belching, Farting, Stinking of the Breath, Nostrils: these we shall explain in Efflation, Chap. III.

The preternatural Excretion of Humors and Excrements is in divers following, as for Milk, though it be plentifull, and come forth of its own accord, yet is not preternatural, and if it swell the Breasts it belongs to Tumors, where we spake thereof.

The Excretion of Seed. | There is preternatural Excretion of Seed, in too much Venery, in a simple and venemous Running of the Reins, of imperfect Seed, or when it comes another away or too quick: of which we shall speak in the Spermatick Excretion, Chap. IIII.

Excretion of Blood. | There is a preternatural Excretion of Blood, in the Bleeding at the Nose, in the Terms or Hæmorrhoids immoderate Flux, and at the Eyes, Ears Yard, Privities of Women, Fundament, the Pores and other open Parts: of which we will treat in the bloody Excretion, Chap. V.

Excretion of Matter. | There is a preternatural Excretion of Matter, by the Eyes, Ears, Nose, Vrinary Passages, Womb, and other opening Parts: these shall be handled in purulent Excretion, or of Matter, Chap. VI.

Excretion of Water. | There is a preternatural Excretion of Water in Tears, dropping at the Nose, snotty Nose, Whites, over much Sweating, or evil Sweat, and by the Ears, and other open Parts: of which we shall speak in the watery Excretion, Chap. VII.

Spitting. | There is a preternatural Excretion of Spittle and Humors mixed therewith, in Ptyalisme, or Venom, Spittle, and other Water, or Blood, Matter, and Imposthumes: these shall be described in Spittle, Chap. VIII.

Vomiting. | There is also a preternaunral Excretion of Meat and Humors, and Excrements in divers Vomitings, as of Flegm, Choller, to which the Disease of Choller is referred: also of Blood: of which we shall speak in Vomiting, Chap. IX.

Pissing. | There is a preternatural Excretion of Urine, and other Humors in unvoluntary Pissing, or immoderate, burning Urin, mattery Milk like, blood, and when the Urin cannot be held, and when it flows out at a Wound or is tinctur'd: which shall be explained in Pissing, Chap. X.

Dejection or Stooling. | The preternatural Excretion of the Excrements of the Belly, and the Dung is in the Flux Diarrhæa, Lientery, Disentery, Needing, Liver-flux, of thick Blood, Matter, Slime, Flegm, Fat, Vomiting of Dung, Pissing it out, or sending it out by the Womb, or a Wound: of which we shal speak in Dejection, or going to stool, Chap. XI.

Excretion of Filth. | There is a preternatural Excretion of divers Filths, by the Ears, Nose, Eyes, Womb, Skin, between the Toes, Teeth: which we shall describe in the Excretion of Filth, Chap. XII.

The divers Bodies which are in the Body of Man which are wholly besides Nature, and are preternaturally sent forth, are either living or without Life.

The

Excretion of Living Creatures.

The live Creatures that come out of the body either live and move, as Worms, Fundament-worms, Worms in the Nose, Ears that come forth by coughing, Pissing, *from* Ulcers, Wounds, Worms in the Teeth, Navel, Lips, in the Hands: *of all these, we shall speak in* the Excretion of Living Creatures, Chap. XIII.

Excretion of living Creatures that move not.

Other Living Creatures that come forth are alive but move not, nor are sensible, as a Mole, Grove-wormes, *the* Gourd-worm: *which shall also be described in* the Excretion of living things Chap. XIIII.

Excretion of Earths.

The Bodies without Life that are sent forth, are earthy, as Pissing of Sand, *and* Stones, *or from* the Eyes, Nose, Mouth, Fundament, *from* the Tongue, Pores, *as* Gravel, *from* the Teeth, *and the like: of which we shall treat in* the Excretion of Earth, Chap. XV.

The voiding or Excretion of things that get into the Body.

There are many things come forth of the Body which are not there bred, by the Eyes, Ears, Nose, Mouth, *as by* Spitting, and vomiting by stool, Urin, *by* the Breasts, Nipple, *and* the Skin: *which shall be described in* the Excretion got into the Body, Chap. XVI.

CHAP. I.

Of the Voiding or Excretion of Parts.

The Kinds.

THe Voiding or Excretion of the Parts of Mans Body, by which they are taken from the Body, is twofold, first when the parts fashioning the Infant, or the Infant it self is cast forth: or when the Original parts that constitute the body, fall off.

A Natural Birth, but not without Pain.

When the Infant is put forth of the womb, it is called *Partus* or bringing forth and this is either Natural, as when the Child, being ripe (the time being expired of travel) is brought forth. And this being Natural, is not reckoned among the Diseases that disturb Mankind. But seeing this Action by reason of Sin is painful and must be looked after, we shall here speak of it, that we may know how it differs from that which is preternatural, and how it ought to be ordered.

Abortion or Miscarriage.

The Birth is preternatural, when it is untimely, or before the time ordained, which is commonly the tenth month, although some hold the birth of the seventh month to the Legitimate. Abortion is when the Child is not come to its full Ripeness and Growth, is sent forth sooner then it ought to be, either dead, or in desperate condition; sometimes it is so little, in a Lump, no bigger then a Grape, that you cannot distinguish the Arms, Legs, or Head, such we have seen often, after some weeks conception sent forth; and that we might perceive the Limbs, we divided them with an Instrument; and we perceived two black points like Eyes in the Head, and a little Spot upon the right side shewing the Liver, the body being all over white besides. We have seen at other times a Child of a fingers length, having all the Members plain to be seen for the distinction of sex also, with Nails, and we made a sceleton thereof, by cutting an Anatomy; as we did by others that were larger. Also I knew a woman, that after she had brought forth a Child naturally at the time, within a few dayes after was delivered of another a span long.

Superfoetation or too many at a time.

I observed also that a famous Merchants Wife which was delivered with little pain, of a Child a hand long, after she had with hard Travail brought forth, another dead Child in the eighth month; and which is more wonderful in the year 1655. A Contrey-man came to me for Counsel, concerning his wife lying of a lusty Child which she brought forth three weeks after she had miscarried of another that was dead.

If there be three or four at a Birth which is rare, yet is it not preternatural (when they are compleat,) either at one time or at divers; some talk of an infinite Number, which could not come to a just proportion, and that may be counted Abortion.

Children so delivered although unripe and little, yet are sometimes whol and of good Complexion; otherwhiles lean, and consumed, if they have been long dead in the womb, and they come out slowly, and sometimes corrupted and sticking; sometimes we perceive the signs of Diseases in them. As we discovered a Child that was but half the time in the womb by the Swelling of the Legs, bigness of the Belly, and aboundance of water there, and in the great Veins to have the Dropsie in the womb.

But if a compleat Child should die through the difficulty of bringing forth, it must be referred to the defect of bringing forth: also if it remain in the womb after it is so dead, as we knew a woman that kept a Child that died so, twenty weeks after the time of Delivery, she died also, and after we took it out rotten and stinking.

If a woman bring forth a monstrous or ill shapen Child, except it be by Abortion or it be dead, this is not to be referred to a preternatural Birth, but to evil conformation or Deformity from the Birth: as we shewed in Deformity.

The taking off of parts that constitute the Body.

The taking away of parts from the body, although it may be a Disease in number diminished, or if they come piece meal, in magnitude diminished, where we made mention of them, yet they may be referred hither.

As if the Eye be thrust out of its place, or if any humor as the watery, Crystal, or glassie Humor of the Eye should flow forth, or if part of the Brain should come forth at the Nose, the Teeth pull'd out of the Mouth, the tongue cut off, the Lungs be spit up, the Guts fall out, as in the Hæretick *Arrius*, by a divine Judgement rather then by a Natural Cause. Or, which is usual, when from a wound any part of the Brain, Lungs, Liver, or Spleen comes forth, as we said in the Hurt of those parts.

The Causes.

The Causes of the Excretion or Voiding of an Infant, or of any parts that constitute the body, is the solution of Contiguity, or things near or of Continuity, as shall be shewed.

The separation of the Vessels of the Child which were joyned to the Vessels of the Womb, is the Cause of Natural Birth.

Natural Birth when the Child comes ripe and quick into the world, is when the child is so grown that the Mother can no longer contain it, but it must have more Air for life, and more nourishment, and if it should grow bigger, it could not get out of those strait Passages. Therefore provident Nature, ariseth and moveth it by the expulsive Faculty, separating the Veins and Arteries, by which the bed of the Infant or Secundine was joyned to the womb, without any hurt, even as the stalks of ripe Fruit fall easily from the tree, driveth down the Infant by the help of the Mother, and so brings it forth, not without pain, labor, sweat, and bleeding, by reason of the opening of the Veins in the Womb and Secundine more or less in all Women.

In

The separation of Vessels before the Child is ripe is the Cause of Abortion

In a preternatural Birth, when the Child is sent forth unripe, by Natur's force, dividing the Connexion of the Vessels, there are sometimes less accidents then in a Natural, if the Child be small. But if there be this Separation of Vessels by a greater force, and solution of continuity, and tearing, which stirrs up Nature to the work, there are greater accidents, as Pains and Bleeding.

The Separation of the Vessels by the violent Motion of Body or Mind is the Cause of Abortion.

There are divers Causes of the dividing of the Vessels, and spurring of Nature to the work which procure Abortion, if the Child be shaken by violent Motion of the Body, so that the Vessels by which it hangs to the womb are divided. Nature especially when near the time, will send it forth, so it may be driven down by leaping, as *Hippocrates* speaks of the tyre-maker, that cast away her Child voluntarily, also it may come by other violent motions, especially of the lower parts, by riding, running, or other violent Motion.

It may come also with pressing of the Belly, by some external Injuries, or with strong tying of the Muscles of the Belly, or from couging, vomiting, neesing, crying, scowring, by which also in a Natural Birth, the Delivery is helped.

As the Excrements of the belly, so the Child also may be driven down in a Convulsion made by the compression of the Muscles, and a violent motion of the body. As we saw one that without Sense aborted in the fit of a Convulsion: and wondered when she came to her self what had been done to her Belly.

Also Nature stirred up by Passions of the Mind, through the vehement Agitation of the Spirits, will cause Abortion; as by Fear, Anger, and other Passions hath been ordinarily seen, especially if they swound, for then the Child is deprived for that time of vital Spirits, with the Mother from whom it receives them.

Abortion caused by stirring up of Nature.

When Nature is stirred up by things taken or applied, it voided divers things, and so also the Child, as by the use of purging Medicines, which force Nature violently, so that not only the Excrements, but the Child also is voided. Also by the use of those things mentioned in the want of Terms and bringing forth, either taken in, or applied to the womb by opening the Passages, and provoking the womb, by a Propriety to provoke Terms, or driving down the Child, Abortion may be caused.

The expulsive Faculty is compelled sometimes by humors that burden the womb, to void not onely them, but the Child also, especially by blood, which if it be too plentiful for the nourishing of the Child, and not consumed by it, about the Veins of the Womb, it burdeneth Nature, which labours to throw it out, and sometimes the Terms comming upon a Woman with Child, the Child is also sent forth with them. Therefore when women with child have their Terms, they are in danger to miscarry. Or if the Terms be provoked by opening a Vein in the Foot, the same may happen, and therefore women with Child must not be let Blood in the Foot. Also the Terms will sooner be provoked, if the blood be thin, cholerick or foul, and unfit to nourish the Child.

When the womb is moisthed with water, so that it is too loose to hold the Child, that it is the chief cause of Abortion, as some say. And if it were so, it must needs be without it, and moisten the Orifice of the Neck of the womb, which is close shut in women with Child, because it cannot be in the womb, whose cavity is filled with the Child; and if it could be there, it could not so loosen it; nor can it do it when in the Neck of the womb, because it cannot remain there, and there must be a greater cause of Abortion then that.

Separation of vessels by a dead child is the Cause of Abortion.

The chief Abortion is from a dead Child, because then Nature labours to void it, as being burdensom, the causes of dead Children are divers.

As external force to the belly being great, as a Stroak or Contusion.

Want of Nourishment by which it decaies and at length dieth, this is not ease, for while the Mother liveth, the Veins can scarce be so empty, that there is nothing for the Child. Moreover, though the Mothers blood be impure and foul, the Child will have the best of it, hence it is that we have observed, that women in Ptysicks and Hecticks, have gone their time and brought well. But it may happen, that if a woman with Child have her Terms violently and long, the Veins of the womb, and all other parts will be so exhausted, that the Child must want Nourishment. And this is so, if for the Causes aforesaid, the Child being alive, the Vessels are separated from them of the womb. And then it can live no longer, not only because it wants Blood, but because it wants vital Spirits, by reason of the Separation of the Arteries, and cannot take breath.

The Mothers by certain signs do know that the Child in the womb, hath a Disease and is sick, and like to die, but those are not easily determined till Birth, nor then, except there be visible manifestation, as I said of the Dropsie. But without doubt Children in the womb have some Diseases, as a hot Distemper must needs be in the Child, when the Mother hath a Feaver, which is in all Parts, and also in the Child. Or when the woman hath another Disease, she may communicate it to the Child, or she being full of evill Humors, may conveigh them into the Child with the blood, and so it may be cacochymical or of evil Juyce, or she may give it the Pox, or Plague, and this is not without a great cause, because the Child takes the best, and most agreable to it, and though the Mother be sick the Child may be sound. As Children that sucked their Mothers of the Plague have been by us observed to escape it when others have died. Yet I knew a Child born of the mother when she had the small Pox to be full of the same. Also it is thought that things taken by the mother or applied to her womb may bring a malignant quality destructive to the child; as many Medicines which do kill children, and are Poyson.

Some Diseases that come from the Seed in conception to the child, appear sooner some, later, and kill him before his Birth, or continue by him after, they are mentioned in Deformity in Diseases original.

A Wound or an Ulcer is the Cause of taking away a part that constitutes the Body.

There is a Solution of continuity, divers waies in the voiding of parts that constitute the Body, as a wound, when part of the substance of the brain Lungs, Liver, Spleen, is cut off and comes out by the wound, or the teeth or tongue is cut off; they or some of its Humors fall out, which also may come from an Ulcer. Also the Brains may come out at the Nose by a contusion: as we shewed in Wounds of those parts.

The Cure.

A natural and legitimate Birth, when the Child comes ripe forth in due time, he must not be delivered, but well ordered, and if it be difficult, assisted. Concerning which how the Mother and the Midwife should behave themselves, we shewed in the defect of Child-birth.

The Gouvernment of the Mother and Child after Labor.

When travail is past, then you must have a care of the Mother and child, for the Mother you must mitigate her pain, and provoke her Flux after Labour, and strengthen her thus. Let her be raised up gently in her bed that she faint not, and give her broath, and wine, and good Scents to refresh her, and let her be moderate in eating and sleeping, and keep her

her out of the Air till she grows strong, and her womb be brought to its former Condition, which will be sooner if her Belly be rouled gently down.

As for the Child, let him be washed in hot water from his filth, and wiped with Feathers, and anointed with cream or butter, or Oyl of sweet Almonds, then roul him, and lay him in a Cradle, and rock him to sleep, and to learn him to suck, hold him to the breast: it is best to try that as soon as he is washed, for comming thirsty out of the bath, he will presently lay hold on the Teate and suck.

After Abortion or Miscarriage, there is no other order to be observed then after travail. And you must after take heed that it cometh not again, which it is probable it will if she hath been formerly subject to it. And this is done by things given and applied before conception, and when she is with Child.

The prevensing of Abortion before Conception.

Before the woman hath conceived, which she may be certain of, if she hath not used a man since her Abortion: you must consider diligently, if there be any secret cause in her body, by reason whereof though she do conceive, and the child be formed (for if the Seed conceived presently flow forth, it is not a true but false Conception, and the cause of barrenness: as we shewed) yet she doth not keep it. And this is done by observing her constitution, whether she be Plethorick or Cachymick, of much or evil blood, and as the Humor aboundeth, you must cleanse the body by bleeding, purging, sweating, and good Diet. Or if she have a Disease or Fault in the womb, which may cause this, you must study to amend it. But if there be no Humors appearing that can be thought prejudicial, you must strengthen the womb, that the child hereafter may stay, by Medicines mentioned in Sterility, external, and especially baths which they say are best, and therefore they sit in hot baths often.

To prevent Abortion after Conception.

After the woman hath conceived, which she knoweth by certain signs, then you must take care that she may go out her time, and that the child may be lusty. But if you perceive it to be dead, you must not do so, and if you be certain thereof, you must use things that provoke Abortion, for either the child or Secundine remaining, will be the Death of the Mother.

There are divers things good to retain and keep up the child, after you have removed all causes that may hurt it, or remove it.

Somtimes it is good to let blood, if we perceive that abortion came from blood abounding about the womb the former time, by reason of Plethora, in regard she had her Terms in the time of her being great: and if we see they begin to flow again as they did, you may let blood in the Arm not the Foot, because that will move the terms: nor is litting blood to be feared, as the Ancients thought, when people with Child are full of blood, for I never knew any miscarry thereby, though it hath been done twice or thrice; and have seen divers wounded, and that have lost much blood, and yet the child hath not been the worse, yet is it not to be done rashly, but a little must be taken at once, and more the next month, and the third time if need require.

Also you must not be rash in purging women with child, that are apt to miscarry, except the body be too much bound, and then administer Clysters, or some opening, gentle Medicine; or if the body be very foul, then you may give some stronger Purge, and that will do no hurt but good; for many women by chance, not knowing they were with child have taken Purges, and had a great looseness, and the Child not the worse, neither did they miscarry.

There are things that prevent Abortion by altering, which have an astringent Quality, to fix the Vessels by which the Child is tyed to the womb; and these add strength to the womb, and vigor to the child, and this they do by a Propriety known by Experience.

Some things are given often, especially when they are nigh the time. These Pouders are best taken in Wine, or the Yolk of an Egg, or with Sugar of Roses, or made into Lozenges, with Sugar dissolved in Rose or Plantane-water.

Take *Red Coral in pouder two drams, Ivory one dram and an half, Mastick, or Frankincense half a dram.*

Or, Take *the dry Grains of Cochynele one dram, Pearls or precious Stones half a dram, with a little Leaf Gold* make a Pouder: It is given by it self, if the woman supposeth her Child not well, or mixed with the former, or with Margariton frigidum.

Another, Take *Roots of Bistort, or Tormentil two drams, Date stones one dram and an half, Plantane seed one dram, water-cresse-seed a little parched half a dram, Amber two scruples* make a Pouder.

Or, Take *the Runnet of an Hare dryed two drams, Crayfish parched one dram, burnt Ivory two scruples, Coriander seed prepared half a dram, Red Sanders one scruple*: make a Pouder, this may be given alone, or with the other; and if the Matrix of an Hare be dryed and poudered it is better, others add the Pizle of a Bull, or of a Dear.

You may make of these this Mixture. Take *Conserve of Roses one ounce and an half, Citron peels, and Quinces candied, each one ounce; Conserve of Sage flowers, or of Mints which strengthen the Womb, six drams, of candied Myrobalans, Pulp of Dates, each half an ounce; of one or two of the Pouders aforesaid two drams, and with Syrup of Citrons* make an Electuary.

Dates their Stones taken out, and they filled with the Pouder of Cuchyneile, and eaten before and after Sleep, are said to prevent Abortion.

The Water called the Childrens Balsom, made of many things steeped in Sack, and distilled Waters, is good to be taken every day to prevent Abortion.

Outwardly Oyntments and Plaisters, applied to the Womb, before and behind about the Reins are also good. And they are used when we are certain of Conception, at first a little and then more often, especially if any signs of Abortion appear.

The Oyntment. Take *Oyl of Roses, Myrtles, Mastick or Quinces four ounces, Juyce of Sloes, Bdellium dissolved in Vinegar of Roses, or red Wine half an ounce, Liquid Storax two drams, Wax as much as will make an Oyntment.* You may add *Oyl of Mints half an ounce,* which is good against all Fluxes, and proper against Abortion.

Make other Oyntments of these Pouders. Take *Frankincense, Mastick, each two drams; Sanguis Draconis one dram, Bole, or sealed Earth half an ounce, of all the Sanders one dram, Spike half a dram,* mix them *with the Oyl or Oyntments mentioned, or with Wax* make an Oyntment.

Or this: Take *Snakeweed, or Tormentil roots, Cypress-nuts, Acorn cupps or Gall, each half an ounce, Myrtle leaves, red Roses, Pomegranate flowers, each two drams; Myrtle seeds, Sumach, or Berberries, Coriander seed prepared, each one dram; Water-cresse seeds, or Cummin seeds steeped in Vinegar half a dram, of all the Sanders, Roots of Galangal, each half a dram; Gum Arabick, or Dragach one dram:* make a Pouder, mix it into an Oyntment as the former.

Another proper Pouder for an Oyntment. Take *Red Coral two drams, Ivory one dram and an half, Goats or Harts Horn, Runnet of a Kid or Hare, each one dram,* make a Pouder. You may add the Pouder of a Turtle baked, mix them as the former.

Oyntments are made more Compound of the Pouders aforesaid mixed with Oyls &c.

Cerots also and Emplasters, may be made of the same either simple or more compound, to be spread upon Leather, and laid on at night, and at other times, with more Wax, and Rosin to make them stick.

The usual Oyntments are that of the Conutes and the Emplaster against Ruptures.

Or we may use that Application which we mentioned to stop the Courses, like an Oyntment or Plaister: it be-

begins thus. Take *Roots of Snakeweed, or Tormentil &c.*

Some commend Amulets, or things to hang about the Neck, as Eagle Stones which hath a Stone within that rattleth, if it be tyed to the left Arm, bare, or tyed first in Calfes skin, which is thought to provoke the Birth, if tyed to the Foot, and to hinder it if to the Arm, or under the Breasts.

Others commend the Jasper or Lapis Lazuli, to be hanged about the Neck, or Mallows, Pellitory, Tormentil with the Roots.

The course of Life which a Woman must use to prevent Miscarriage, consists in temperate Air, let her beware of Heat and Baths, let her eat meat of good Juyce temperate, let her drink small red wine and water; let her take heed of sharp or hot things, pot Herbs, or Spices, or bitter things which hurt the Child: from things of strong Scent, as Saffron and the like, which move the courses or provoke Abortion, as we shewed in the Causes. Let her take heed of Passion of Mind and violent Exercise. Let her either rest or walk gently. Let her not often use man. Let her Body be kept from costiveness. And let her abstain from all things that may breed Diseases in the Child, as convulsions, and let her keep a good Diet.

The Cure of Parts taken from the body. If the parts that constitute the Body that be sent forth are noble it is deadly, as the Brain, Lungs, Liver, Spleen, when otherwise it hinders the Functions, and when these parts are quite gone, these cannot be renewed, therefore we use no other Cure, but to the solution of continuity, as the wound, contusion or ulcer: as we shewed in the Functions Hurt, of those Parts.

CHAP. II.

Of the Falling and Sticking forth of Parts.

The Kinds,

THe Falling and Sticking forth of Parts is preternatural, although they be not quite separated from the Body, because they are removed out of their place, outwardly. Those Stickings forth of parts which come from Fractures, or Dislocations. because the parts are not then in another place or out of the Body, but only stick out, and so cause a Deformity, are shewed in the Diseases of Deformity.

The comming forth of Parts. When a part is removed and yet not fallen off, as when the Guts, and Cawle come forth. it is seen by the Tumor, and therefore we spake thereof in Tumors.

The comming forth of parts from the Body, when they appear to the Eye, are of the womb, Fundament, Stones, the Eye, or Tongue.

The comming forth of the Womb. The Womb or Matrix, falls through the Privities far sometimes; and then you may see the Neck turned, thick, and rough and white for the most part, though red in some places, and it is swollen, and stops all the Privities, hanging down a span in length like a bag, sometimes less, and the bottom of the womb is seen, and its orifice reddish and like Blood, with swollen Lips, as I have often diligently observed.

The falling down of the Womb. Sometimes the Womb falls down a little above the Privities or into them, and comes not forth, and is to be felt only, or it only hangs out a little, and grows forth more and more, except it be prevented, and this is called the Descending or Falling down of the womb

And if Inflammation or Corruption happen not, when the womb hath long been forth, and ill ordered, there useth to be no great accidents but filth, hinderance in walking, and a sense of weight, so that the Belly and Loyns seem to be drawn down, but otherwise if the woman can put it up again, as usually it is, she may use a man, and conceive, and go out her time without the Falling of it down while she is with Child.

The Falling out of the Fundament. The Fundament externally like a purse internally is made of the end of the Muscles of the strait Gut, if it be let more forth then at the time of going to stool is usual, and cannot be put up again into the Body, but remains outward with some part of the Fundament, it is called the Falling down of the Fundament.

Somtimes it is without any other Disease, as when by straining it comes forth, and continues longer or shorter, and comes of it self, or with little trouble into its place again.

Somtimes though it be put up, it presently especially at the stool, comes forth again, this is usual in Children, and somtimes in Men.

Somtimes the strait Gut falls down and swells, so that it cannot be put up, or with much difficulty. Sometimes it is red and inflamed, and will endure to be touched, that it may be put up.

The Looseness of the Fundament. Sometimes it falls out without sense, and cannot be drawn up at will; this is called the Palsie of the Fundament.

The Falling out of the Stones. We have seen the Codds open and the Stones hang far out.

The Falling out of the Eye. The Eye cannot hang far out of its place, as we shewed in Deformity, and if it stick far out, it is called the Falling out thereof.

The comming forth of the Tongue. The Tongue sometimes hangs out of the mouth, and this is called the hanging forth of the Tongue.

The Causes.

The Cause of the comming forth of the Guts, Cawle, Womb, Fundament, Eye, or Tongue is either from some opening, and the Rimme of the Belly, or weakness, and dissolving of the Neck of the womb, or the turning of the Fundament, or strait Gut outward: or the loosening of the knitting of the Eye, or Tongue; or a wound of the Codds.

By the opening of the Rimme of the Belly which keepeth the Guts and Cawle in the same, if the Guts or Cawle fall through the opening, then there is a Rupture or Falling out, of which we spake in Tumors. And this opening of the Rimme, is either when it is broken or dilated.

The Cause of the rupture of the guts called Enterocele, and of the Cawle called Epiplocele. The Falling forth of the Guts and Cawle is from the breaking of the Rimme of the Belly, that causeth the Swelling called *Hernia* or Rupture, of which there are divers sorts according to the Diversity of Parts where they fall; for if it be in the Groin, and in the male-kind, so that the Rim be open which covereth the Stones and seminary Vessels, the Guts get through the opening, and so lye under the skin, which is called *Enterocele*; and sometimes into the Codds, and cause a great Swelling when much falleth down, or when they are stretched with wind, or with Excrements. And if they be hard, it is felt, and if there be wind, they make a noise being pressed. And if the Guts stay there and cannot be put up, because they are stretched and rouled together, because the Passage of the Excrements is stopped, they are thrown up again. But if part of the Cawle fall into the Groin by the aforesaid, it is called *Epiplocele*, and the Tumor remains

mains there, not going lower because the Cawle being short and scarce, reaching beyond the Bone of the Privities, cannot fall so low as the Guts, except some part of it be broken, when the Rimme is broken, and then it may fal into the Codd, which cannot be put up again. We saw one in the Groin very big, which we knew was the Cawle by feeling of it to be unequal with Knobs of hard Fat; which we knew was broken by the quantity or relaxed as we shall shew, but being without pain it was neglected, and the Patient lived not long after.

The breaking of the Rimme is the Cause of the Rupture in the Groins of Women.

If the Rimme be broken in the groin of a Woman, where a certian Vessel passeth by it outwardly in the Groine, then there is the Rupture called *Enterocele* or Gut-rupture in Women, which is sometimes very great. And if the Cawle fall there which is longer in Women then in Men, the Tumor is larger then in Men, and is called *Epiplocele* or Cawle-rupture.

The Cause of Navel-rupture.

But if the Rimme be broken in another part of the Belly and the Guts, or the Cawle get there under the skin, if it be in the Navel, it is called *Omphalocele* Navel-rupture, or Exomphalocele, or Rupture about the Navel, if in any other part it is called *Hernia* or Rupture, which you may know by touching, whether it be the Guts, for then they will make a noise, but the cawle will not, and the Guts make a larger Tumor then the Cawle.

The Rimme is broken, either by a Stroak or Fall, or vehement Leaping, or Vaulting into a Saddle, as I have observed. Also by great straining when the Belly is pressed by the Muscles in Labour or Travail with Child, or going to stool, also in Children by crying. Also by a cut, when the skin is healed, and the Membrane left open, or the like.

The Dilatation of the Rimme is the Cause of ruptures.

A Portion of the Guts or Cawle may fall down, only by the enlarging or dilating of the Rimme of the Belly, by which the Seed Vessels descend into the Codds. This comes not speedily but by degrees, with often straining; for when the Guts are carried to the enterance of the Rimme of the belly, they work themselves through or break through, when the force is great. And that this may be so, and that the enterance of the Rimme of the Belly may be so dilated and opened without breaking, it appears, in that more narrow and thick parts, may be so enlarged as the Ureters, through which a Stone falls down, as we shewed. And this we have seen to be by degrees. And in a Rupture-dropsie, when after Death we opened him, we found a round hole not cut or broken, by which the Guts fell into the Codds, by which that thin part of the Gut which is above the blind Gut, was carried to the bottom of the Codd which was full of Water, and it grew firmly to the Rimme in the whol Passage; and the Patient while he lived and was in Health otherwise, voided his Excrements orderly, and complained of no pain. *Fernelius* who distinguisheth this Passage of the Rimme into that which is internal, and that which is external, saith that in the Gut-rupture, and cawle Rupture, the inward Rimm or Skin must needs be broken, and the outward only enlarged. It may be he meant that it was so in Women, that these Ruptures came from the Relaxation of the Rimme of the Belly in the Groin where they have as we shewed a peculiar Vessel.

For he saith that there is a Tendon sent from the Groine to the Rimme of the Belly which strengthneth it, and so also the Guts and cawle.

But in regard that Vessel is not so membranous and thin as the enterance of the Rimme, but is nervous and hard, and therefore is not so easily enlarged, the Guts or Cawle cannot fall into the Groin by the relaxing thereof, except it be broken.

The cause of Navel-rupture is the enlarging of the Rim of the Belly, there.

When the Rim of the Belly is enlarged without being broken, there may be a Navel-rupture also: and this appears, because in great straightnes, especially of Woman in travail, the Navel often swells, by the Guts through straining, sent chiefly to that part of the Rim, where there is a short Passage in the Navel, which appeared at the birth in the Navel string and after grew together, and there distending or stretching the Rim, and when the straining is over, and the stretching, the swelling goes clean away and returns no more, which would not be, if it came from the breaking of the Passage: for which cause, as we perceive plainly that the Navel-rupture continues not, so we may collect, that the Rupture which remains, comes from the Rim of the Belly, so stretched by the Causes aforesaid, that it cannot return, which cannot be in other parts of the rim of the Belly, but that in the Groine, without a breaking thereof.

The cause of the falling out of the Womb, is the dissolving of the connexion of the Neck thereof.

From the Dissolving or Division of the Neck of the Womb, from the parts unto which it is knit, comes the Falling out thereof. For the Womb being chiefly held up by its Neck, upon which it resteth, and unto which it grows firmly, and in other parts being free from all connexion or joyning, that it may better dilate and enlarge it self in Conception, (except on each side a little, and that loosely to the Rimme of the Belly) it cannot be that it should fall all to the Privities, except the Neck thereof which is so fastned thereto, that it cannot be separated, do also follow. And because this cannot be without the rending of the fibrous Connexion which is made by the Neck and Parts adjacent. The immediate cause of the Falling of the Womb, must be the dissolving of the Connexion of the Neck thereof. And if this dissolving be in some part onely near the womb, the womb will hang down in the Privities, with some part only of the Neck turned, but if the Neck of the Womb be wholly separated from the parts under it, then the Womb will all hang forth, with the Neck turned inside, outward, and the womb will not be so turned in the bottom, but as it was when in the Belly, the Orifice onely being open, drawing with it the Membranes and the Rimme which is joyned to them with the Vessels and Stones. And this may be without a Rupture; only from the Looseness of the Membranes which can stretch much, (as we see in Dropsies, when the Belly is swollen, how the Rim thereof is stretched) although the womb hath been long down, as appears in that when it is put up again, Women may conceive, which could not be, if the Vessels were divided from it.

The womb it self causeth chiefly this Separation of the Neck of it from the Fibers or small Veins by which it is joyned to the parts adjacent though not strongly, and therfore it may be without great hurt or bleeding; when it is forcibly so drawn down, that it brings the Neck with it, either suddenly or by degrees, when there is less force, first tearing the Veins next to it, and then turning out the neck downward, which hanging forth, makes it fall more down by degrees through the weight thereof.

The forcible untying of the Neck of the Womb, is the cause of the womb Falling down.

The womb is thus driven down by great and often straining, by blowing the wind, or otherwise which presseth downward the Guts and Womb, especially in a womans throws in childbirth; when the travail is hard, and the womb gets too much downward with the Child, and the rather when the Child getting through with difficulty, thrusts the Neck of the Womb down, and so untieth it from the Veins. Or if the Secundine or after Birth, sticking still to the womb, be so driven by the Midwife, that the womb is driven down also with the Neck thereof. For these Causes after Child-bearing the womb falls down; and

and those Women which have often brought forth, and endured such Midwives, are presently troubled therewith, or when they grow old.

The same may come from Leaping, or the like Shaking of the Body; and the Womb may hang out thereby.

Also from the Neck of the Womb it self besides, when it is pull'd away by the Womb, there may be a Falling out of the same, when it is separated by Force from the parts beneath, by violent and frequent Copulation, as in Harlots which are continually rubbed; or from some Corruption in the Neck, by which we once saw the womb fallen out.

Also from other Causes, this Falling down of the womb can scarce proceed. As for the loosenes of the Ligaments (or of Muscles by which some thought the Womb did hang) which they say comes from the Force mentioned (and by which the womb is driven down,) or from the plenty of Humors that wet the Membranes. We, (since there are no such Muscles, because as we shewed the womb must be free, and Membranes so loosned, that they may follow the womb, nor so fast tyed as they ought to be, if the womb hang by them) cannot grant the Falling out of the womb to be from the looseness thereof. For although the womb be loosned, and the Vessels stretcht beyond their bounds, yet can it not fall through the Privities, except the Neck be separated, also which only holds it in.

Nor can the breaking of the Membranes be the Cause, as some say, because, we found in the Anatomy of a Woman whose Membranes were putrified and consumed, long before her death, as appeared by a Flux of stinking matter, that the womb moved not out of its place, but was firm.

As for the watery Humor which they say causeth the Falling out of the Womb, we shewed that it could not do it by moistning the Ligaments, and now declare, that in Women that have the Dropsie, in whom the womb and its Membranes swimms in water, the womb falls not out; yet it may come to pass in the Whites, that the neck of the womb being continually moist, and therefore too loose, that the womb being compelled by other Causes, may easier slip down, and the neck may yeeld more easily, and be inverted.

Some teach that besides this Falling down, that the womb while in the Belly may be moved on one side, and get also up to the Stomach. But being it grows to the neck, and is compessed every where with the guts, abiding commonly in the middle, it will not easily get into other parts, and will rather go downwards then upwards. Except perhaps it grow so that it take up more room then formerly, as we see in Women with Child: and then also it rather goes downwards by its weight, and the Belly is more swollen and harder beneath. For which reasons, and the other accidents in the Mother-fits, we declared in the Cure of them, that they come rather from Vapors that arise from the womb, then from the ascending of the womb it self.

The cause of the falling out of the Fundament is straining.

The Falling out of the Fundament is from the Inversion or straight Gut, for then it swells, as when going to stool, the Fundament sticks out with straining to let out the Excrements, till it be drawn in again; so that if by great force and straining with hard Excrements, it be so brought down, that it brings a part of the straight Gut with it, it is the cause of its staying out. The same may be from other causes that bear down, as in Child-birth, when the Delivery is hard, the Fundament also falls out, also from forcing about the Fundament, as in the Tenesmus, or needing or in the Flux called *Dysentery*. And we have seen in an Incision made in the Rimme or Peritonæum near the Fundament for taking a stone out of the Bladder, that through pain, the Fundament hath been by straining thrust out, and the Yard also though in an Infant and little, hath been swollen and flood. And I have observed in some Children troubled with the Stone, that they had not only this coming forth of the Fundament alwayes when they strained to make water, but an Extension of the Yard, especially in the Head and Fore-skin; from their often handling of it through pain, which were the undoubted sighs of the Stone in the Kidneys.

And if the Fundament be so thrust out by straining, that the straight Gut be drawn from the Mesentery or middle Membrane by which the Guts are held, then they cannot be put up or kept in; although the Muscles be right against the Fundament to draw it in again gently, yet if it be far forth and tied with no Ligaments, the Muscles alone cannot do it, because if the Fundament be far out, they will fall out also.

The Looseness of the Muscles of the fundament is the cause why it cannot be drawn in.

It may come from the weakness of the Muscles which draw in the Fundament after stool, and constrain it up, that the Fundament may be so far forth, that it cannot be drawn in, by which means the Fundament may be said to be forth, but not to fall out except Force or Straining perceeded; because it is not so retained by these final Muscles, that when they cease to act, it should presently fall out of the Body in which it was included without any Force. These weakness which makes the Muscles unable to draw back the Fundament, that falls out by stool, befals them, which have often had the Falling of it out; or it comes from too much cold of the part which is very sensible, by sitting upon a cold stone or the like, or by staying in the cold Air or Water, which touch the Fundament.

The Looseness of the muscles is the cause why the fundament cannot be drawn back.

Many suppose that Falling of the Fundament, and that which is called *the Palsey of the Fundament*, comes from Loosness of the Muscles through a Defluxion upon the Nerves. But it is improbable, that a particular Palsie of this part should be alone, without any other part affected from the Defluxion. Nor is it probable that a Defluxion which must needs fall in abundance to cause a Palsey, should fall only into the lowest part of the *os sacrum*, where these slender Nerves are accompanied with these Muscles, and not rather fill the whol Cavity of the *os sacrum*, by which means the Nerves might be dissolved. Therefore if there be a Palsie in the Muscles of the Fundament, it would be in the whol Body, or in the inferior parts, as well as there. And though there be a great Resolution of parts in an Apoplexy, we find none there, nor doth the Fundament fall forth, nor in any other Palsie, when all the lower parts are resolved, yet the Patient can go to stool and draw in the Fundament, and though it be weaker for the Disease, yet it falls out. For which cause, if difficulty of drawing back of the Fundament be from the Nerves, which comes seldom, it comes from a Palsie caused by a Defluxion, and we suppose that it comes from compression of the Nerves, or contusion by Fall or Stroak about the Crupper, or from some great Coldness of the part which is not only upon the Muscles but Nerves.

The Connexion or Fasling of the Eye being loosned by a Contusion is the cause of its coming forth.

When the Connexion of the Eye with its hollow roundness is loosned, it falleth out, and this comes by some violent Cause, because it is so fixed to the place, that when it is brought to the Table boyled it can scarce be got out.

Yet the Eyes fall out by a great Contusion of the head, by a Fall or Stroak.

And scarce by another means, except they start out a little by straining, as in Child-birth, crying or roaring and so seem bigger, yet they fall not out by that means but only stick out, of which we spake in Deformity: because by straining they cannot be much distended, but a little forced by the Muscles.

Some think that the Eye may fall out by the stretching of the Globe with Wind and Moisture gathered before it, but since we find no Cavity in the Eye, but it is full every where, and there is no way for these to get in, or can they be

be bred in the Eye, or come from other parts, we cannot yeeld to them. As we shewed in the Causes of pains of the Eyes, from Wind and Filmes, which they suppose to come from Defluxion of Water.

The loosning of the Connexion of the tongue from a contusion, is the cause of its coming forth.

The Falling out of the Tongue may be from the loosning of its Connexion, it is so strong bound by Muscles, a Coate and Ligaments, that it must be done by great Force. But it happens from a Contusion of the Neck or Breast, as when theeves are racked, their Tongue sticks out, and it may also come by other means.

The cutting of the Cod causeth the falling out of the stones

I saw one whose Stones hung out by a wound which was given upon his Codd. And I observed the same in one which was shot with a Bullet and lost half his Codd, that his right Stone, with the Seed-vessels hung forth bare.

The Cure.

The Cure of the Falling out of the Guts & Cawle in Ruptures.

The Falling down of the Guts and Cawle which comes from the breaking or stretching of the Rimme of the Belly, causeth the Tumor called *Cele*, if it be in the Groine, and be but little, causing no great pain, it is neglected, or it is easily cured if taken in time; as also the Omphalocele or Navel-rupture, which some have all their lives, which will fall in when it is pressed, or the like; but some Navel-rupture vanisheth of it self: as I shewed. But if the Tumor descend to the Codd, in the Gut-rupture it is harder to cure, or dangerous, for if it will not return by any means, but cause Pain and Costiveness of Body it is deadly, and the Excrements are spewed up which declare it.

Also the Navel-rupture or the like, if it cannot be put in, and produce the same accidents is deadly. And we shewed that the Cawle-rupture killed one, when the Tumor in the Cod grew hard In other kinds of Ruptures in the Belly or Codds, if the Tumor will yeeld, although it be of short continuance, yet to take it quite away that it return not, and to make a perfect Cure, it is difficult, especially because the Patient must continue them for their Operation, and Rest, and be bound which he wil unwillingly undergo. But if it be old, it is impossible, except by manual Operation, and that is painful, and dangerous of death if by Incision, as is usual, and the Stone on that side must be left, if it be made in the Groine. And if the Patient will not adventure that you must labour to hinder those Tumors from increasing which you cannot take away. All which shall be declared and the manner how, by Medicines both inward and outward; first how Medicines may be applied to the cause that is the part fallen, then how to the Disease which is the Solution of Continuity in a Rupture; or of Contiguity in the relaxing of the Rimm of the Belly.

We use things to put up the part fallen, and to keep it in, and hinder it from falling out again; if it be Gut or Cawle fallen out of the cavity of the Rimme, either causing a Tumor in the Groine or Codd.

We put up the Tumor in the Groine and Codd with the Hands by degrees, or in the Belly, by pressing and moving it to the hole whence it fell, which we find out with the finger. And this is done when the Patient lyeth upon his Back, so placed that if it be below, that his Feet may be higher then the rest of the Body, by which sometimes the Gut goes in of it self, so I saved the life of a Countrey-man twice that was broken on both sides; when he vomited his Excrements, and was in great pain; and a while since I cured a Virgin that was burstен, which vomited her Excrements, by putting up the Gut with my Hand.

And if this Operation do it not, as when the Gut is out it comes to pass often, through Distention by the wound, and Wrinkling and Hardness, that the Gut is so swelled, it cannot be reduced by the Passage, and then you must have a care, least the Passage of the Excrements being hindered, they should flie up or an Inflammation should kill the Patient.

Also you must apply the Anodynes or takers away of pain, when there is Pain, Heat and Fear of Inflammation, mentioned in the Tumor Phlegmon.

And chiefly this Pultis, which openeth the wayes and mollifieth the hard Excrements, and expells Wind. Take *Marsh-mallow roots two ounces, Lilly roots one ounce, Mallows, Violets, Brank-ursine, Pellitory, each one handful; Roses, Violets, Chamomil, and Melilot and Dill flowers, Bran, each one scruple*; boyl them in Milk and Water: if there be great pain, beat and seirse them, adding, *Barley flower, and Bean meal, each three ounces; the Flower of Line-seed, and Fænugreek, each one ounce and an half; Fleabane seeds one ounce, Powder of Earth-worms one dram, Oyl of Roses three ounces, Ducks or Hens Grease one ounce*: make a Cataplasm.

When the Heat is not, and we will use Softners and Expellers of Wind, add to it, *Orris roots, Briony, or wild Cowcumber roots, each one ounce; Wormwood, Calamints, or Origan, each one handful; Elder, Rose and Centaury flowers, each one pugil; Cummin and Caraway seeds, each two drams; Agnus Castus seeds one dram*, and without Milk, we add Wine, and with *the Meals or Brans aforesaid, or of Orobus and Lupines, each one ounce, Bay-berries half an ounce, with Oyl of Orris and Rue*: make a Pultis.

Or when there is much Wind. Take *Caraway seeds one ounce, Cummin seed half an ounce, Oyl of Rue one ounce, with Oxymel*, make a Cataplasm.

Rue fryed with Oyl, and applied is good.

Fomentations are made of the Decoctions, of the which the Cataplasm was made of the first if there be Heat, of the last if you must discuss more, adding the Oyls there mentioned.

Also aneint with Oyl of Roses, Dill, Lillies, Chamomil, Melilot, Orris, Elder, Rue.

You may discuss with Baggs, of dry Plants, and Milium seeds, and the other great Seeds and Salt.

Besides you must use against Wind inwardly and outwardly, things to dissipate or discuss and prevent it also. As we shewed in the Wind of the Stomach, and of the colick.

You have need of no external Applications, when the Cawle comes forth, being commonly in the Groine, and will go back only with lying down, or with the Hand, except it be in the Codd, as we shewed: and then you must foment and plaister the Tumor with Loosners, not regarding wind, except it be gotten in the same way.

If the Guts cannot be put up, we are constrained to cut, that the skin being open, and the Guts bare, and the hole by which they fell open, they may better be put up; which is dangerous to do in the Groine, if the Guts are gone from thence into the Codds, because the Guts sticking to the skin, may easily be cut also, as we have seen. Moreover if the Incision be made with such care, the Guts are not hurt, yet in regard the naked Entrals are worse to be meddled with, for the Cure of the pain of the wound, then when they were covered with skin, by this Operation in the Groine, we either do no good, or we give occasion to have cutting to be thought the Cause of his Death, which would otherwise have followed, while the Guts were forth. But we have observed good success by cutting in other parts of the Belly, when the Guts get through the Rimme of the Belly being burst, and can by no Art be put up again, because the Tumor is seldom so great in those parts, and the hole of the Rimme may better be found, and the Guts better put up without danger, being taken hold of near the hole, and by degrees wrought in.

We keep the Guts and Cawle in, and the Tumor from returning divers wayes; by placing the Body conveniently, and compressing the Tumor with the Hand or Instruments.

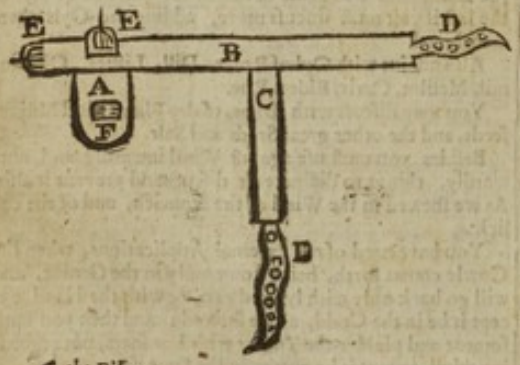
The placing muſt be ſuch that the Guts and Cawle may rather tend inwards then outwards, with the Face upwards, and let him keep his Bed in that poſture, becauſe it keeps them in till other Art be uſed.

The Hand preſſing the Tumor, doth not only drive it back, but keeps it from returning while it is held there, and though this cannot be done continually, yet it is good ſomtimes to apply the hand, eſpecially when the Guts are preſſed by the Belly by coughing or ſtraining, and ſtrive to get out. And if the Tumor be not great, and the ſtraining be uſual, you may keep it from increaſing with the hand.

We keep them alſo up with Inſtruments called *Truſſes*, which they muſt wear while they ſit up, and not leave them off but at night if they hurt not nor hinder, & when they are conſtrained to change them or remove them, you muſt ſupply their place with the Hand. Theſe are made of Bolſters laid upon the Tumor which ſtops its return, which that they ſlip not nor be too ſtrait, are tyed by divers Bands like a Girdle, or from the Shoulders, and the like, tyed with Points, or with Claſpes, and they are to be faſhioned according to the Tumor that the Patient may wear them with little trouble, of which theſe following are the beſt.

The firſt for the Groine-truſs, is made of a Pillow of the length and breadth of the Groine, ſtuffed with wool two fingers thick, and leaſt by uſe it ſhould fetch off the skin covered with Linnen, Silk or Leather, and that it may ſtick faſt, there muſt be a broad Girdle of the ſame ſtuff about the Loins ſo faſtned as I ſhewed, to the Groine before, and a broad Rouler of Cotton to the hinder part of the Girdle, to come between the Thighs, that goes through the middle of the Pillow or Bolſter, paſſing through a loop to keep it faſt; and the Girdle muſt be there tyed again.

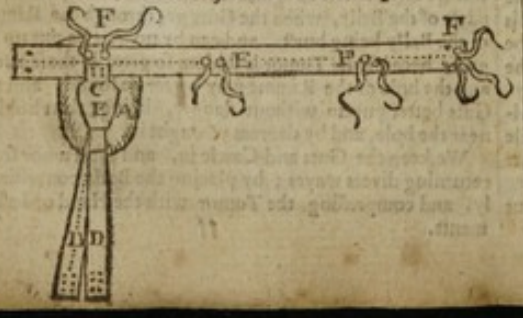
The firſt Inſtrument opened.



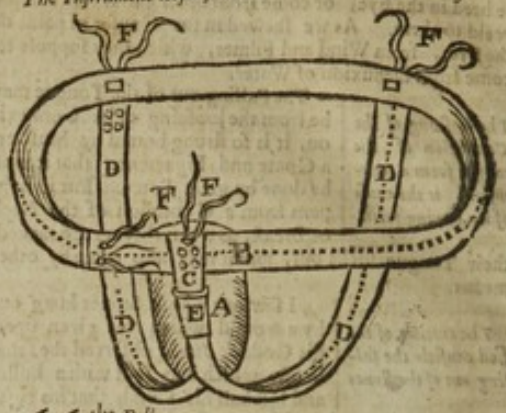
A the Pillow.
B the Girdle.
C the Girt underneath.
D D the Thongs of the Girdle and Girt.
E E the Loops through which the Thongs paſs.
F F the Loope of the Pillow which the ſtring paſſeth through

There is another for the Groine, made of the Girdle and Bolſter, as the firſt; but the ſtring going under, is faſtned before to the Girdle, and paſſeth through the Loop of the Bolſter, and is divided into two bands, which put under the Thighs, are tyed in two places to the Girdle, that they may hold faſter, and keep the Pillow right in its place.

The ſecond Inſtrument laid open.



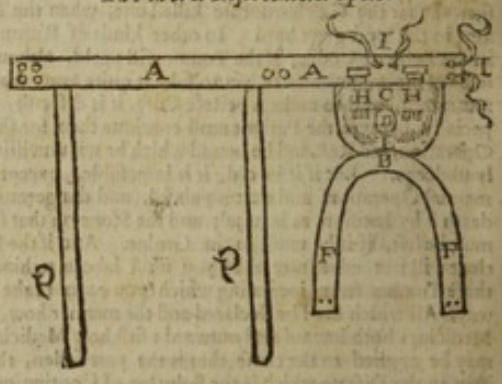
The Inſtrument cloſed, and as it is bound to the Body.



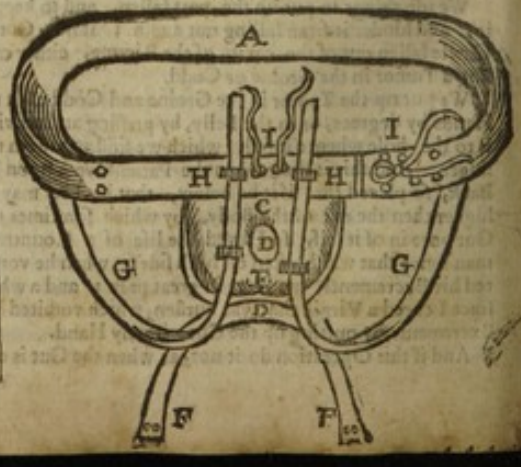
A A the Pillow.
B B the Girdle.
C C the String going underneath.
D D D D two Roulers into which that ſtring is divided.
E E the Loop of the Pillow, under which the Girt paſſeth.
F F F F the Girt by which the Girdle and the Roulers underneath are tyed.

The third Inſtrument to be fitted to the Groin, ſo ſtrong that it is proper for unruly Children, is made of an under Girdle, which is tyed to the Girdle above the Groins, being broad and large upon both Groins and the Codd, and on both ſides, where the Groins muſt be preſſed, like two Pillows ſtuffed with Wool, but in the middle the Yard paſſeth through a hole, and under there is a Bag which holds the Stones not cloſe, and ends in two Roulers, which brought under the Thighs, are tyed both to the Girdle, and do attract the under girt, and beſides there are two other Roulers which are brought forewards under the Thighs, which paſs through the Loops of the two Pillows, to fix the Girt and the Pillows, as the following Figure ſheweth.

The third Inſtrument open.



The ſame Inſtrument cloſe, how it is fitted to the Body.

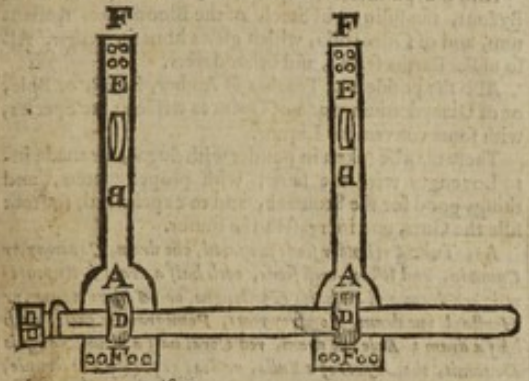


A A A the Girdle.
B the Girt.
C C the same open,
D D the hole of the Girt.
E E the bag of the Girt.
F F F F the two bands of the Girdle.
G G G G the two bands of the Girt.
I I I I the Points that tie the Girdle and the Girt together.

Somtimes the three kinds of Girts which are under the Girdles, that they may not slide down, and be faster, are held by two other Girts that are fastned behind to the Girdle, and cast over both Shoulders, and bound with Points again to the Girdle before.

The fourth and most proper Instrument or Truss, is made of two broad cotton Girts, to both which there is a Bolster, which are tyed behind to the Doubler, and are carried under the Thighs, come up again to both Groins, where they lye upon both Groins with Pillows, and are again tyed to the Doublet, and that the Pillows may be fast, they are tyed fast with aLeather-girdle that passeth through the Loops of the Bolsters, before and behind, and so in the greatest Motion it will hold, and the Bolster in the sound Part, doth help the Bolster upon the Tumor, that it slip not. As the following Figure shews.

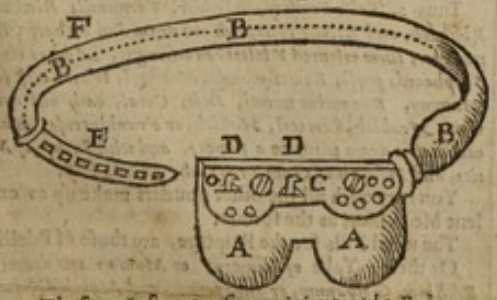
The fourth Truß or Instrument laid open.



A A two Bolsters.
B B two Girts.
C the Leather Girdle.
D D the Loops of both Pillows.
E E the Loops of both Girts.
F F F F the Holes of both Girts by which the Points are fastned to the Doublet.

The fifth Truss is made of Wood two inches thick, thin and round beneath, which hath a space in the middle for the Yard, least it should hurt the Root thereof on both sides, with two Bolsters upon the Groins. This Girdle made of firm thin Iron, that it may yeeld a little, and covered with Leather is fastned above with Nails and Hinches in the outside, that it may open and shut, and the leather it is fastned. As this Figure following sheweth both open and shut.

The fifth Truß open.

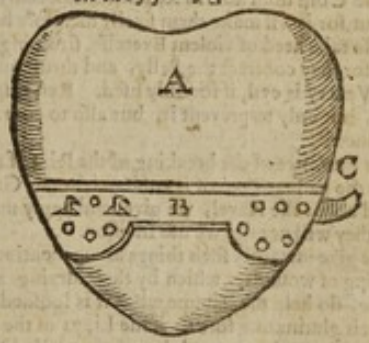


The same Instrument shut as it is upon the Body.

A A A A the Wood.
B B B B the Iron Girdle covered with Leather in the first figure, and bare in the second.
C the outward part of the Iron Girdle bare, fastned to the Wood by Nails and Buckles.
D D the two Hooks
E the outward part of the Iron Girdle bare, with holes for the Hookes.
F F the Iron Girdle divided there, in the first figure onely held together by Leather.
G the Barre made of the ends of the Girdle, joyned with Hookes and covered with Leather.

The sixth Instrument made of Wood, that is broad, to cover both Groins, bowing inwards, and holding up the Codd, with an Iron Girdle like the former. Under which upon the side where the Rupture is, there is a Bolster or Pillow to press down the Tumor: as followeth.

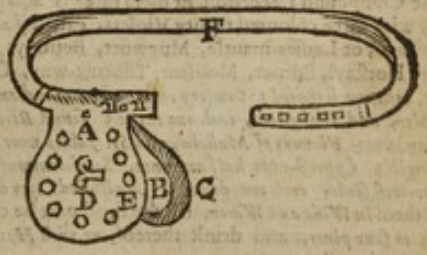
The sixth Truß made of a broad Board, fastned to an Iron Girdle, like that in the fifth figure.



A the broad Board.
B the outside of the Iron-Girdle fastned to the Board.
C the Girdle there divided.

The seventh Instrument or Truss is made of Iron, onely for the Groyn where the Rupture is, with an Iron-Girdle as the former. This is made of thick and broad Plate of Iron, with an Iron-spoon of the same breadth, joyned to the Joynt, that it may move, lined with Leather, and stuffed where it toucheth the Rupture, which is held with the Iron-spoon. As may be seen in the Figure following.

The seventh Truß open.



A the Iron-Plate.
B the Iron-Spoon.
C the Convex, or bunching part of the Spoon covered with Leather.
D the Iron-shell which thrusts the Spoon down.
E little Holes through which the Leather is sewed to the Plate.
F the Iron-Girdle as in the fifth Figure.

For the Ruptures of other parts, as of the Navel, and the places adjacent, Trusses are made of Cotton or Iron-Girdles, as formerly, which goes about the Belly, where the tumor is with a Bolster, or wooden or I[illegible]

Alſo we keep the Rupture from falling down, by taking away the Cauſe that drives it out, as much Meat and Drink, and ſuch things as breed many Excrements and wind, becauſe they fill the Guts, and make them ſtrut out.

To this end alſo we purge, with Medicines mentioned in the Diſeaſes of the Stomach and Colick. To which we add aſtringents for the Rupture, as Rhubarb, Myrobalans, and the like mentioned in the Dyſentery, or we add ſome of the Decoctions following

You muſt give no Clyſters in Ruptures, for if the Guts be out, they fill them, and increaſe the tumor, and keep them from being put up. And if the ſmall Guts be out, whether Clyſters can ſcarce come; yet in regard it is hard to diſtinguiſh them, and the Clyſters may ſomtimes get thither, it is better to forbear, except, after the Guts are put up, when there is a great coſtiveneſs. In the falling out of the Cawle called *Epiplocele*, becauſe Clyſters cannot be ſent thither, if the Belly be full of Wind and Excrements, you may adminiſter them with good ſucceſs.

Alſo Cold doth hurt in Ruptures, eſpecially when they are out, for it wil make them ſwell, therefore beware of it.

Alſo take heed of violent Exerciſe, ſtraining or whooping, for they contract the Belly, and thruſt out the Guts. Alſo Venery is evil, if fortibly uſed. Reſt is moſt convenient, not only to prevent it, but alſo to cure it: As we ſhall ſhew.

For the Cure of the breaking of the Rim of the Belly, or when the paſſage thereof is enlarged in the Groyn, or opened about the Navel, we give, and apply many things, or if they will not do, we uſe Inciſion.

We give inwardly ſuch things as are mentioned for glutinating of wounds, which by their drying and binding vertue, do help the Rimme when it is looſned or broken, by their glutinating force, if the Lipps of the wound are not yet grown hard, and then they can do little, except they can make new fleſh to ſtop the paſſage. Theſe muſt be uſed long, for many weeks, that their vertue may reach to the part affected.

For this purpoſe, you may uſe wound-drinks, mentioned in the Cure of Wounds.

Or of other Plants, green, or dry, boyled in wine, or the like, or made with Honey, or Sugar into a Syrup: As we ſhewed in Wound-drinks.

The ſimple Decoction of Knot-graſs, or Salomon-ſeal, which is called Rupturewort, for its vertue in Ruptures; or of Sanicle; or that of *Fernelius*, which is called Royal *Oſmond*, made in wine, is excellent.

The Compound Decoction of theſe three is alſo good.

Or with three coloured trinity Violets, called *Jacea* or Knapweed, or Ladies-mantle, Mugwort, Bettony, Agrimony, Horſtayl, Burnet, Mouſear, Thorow-wax, Creſſwort, *each one handful; Comfrey roots one ounce and an half, Madder, and Snakeweed, each one ounce; round Birthwort half an ounce, Flowers of Mullein, and St. Johns-wort, each one pugil; Cypreſs-nuts half an ounce, Southernwood, and Water-creſſ ſeeds, each one dram; Aniſe ſeeds two drams,* boyl them *in Wine and Water*, till the third part be conſumed, *to four pints*, and drink thereof, *or with Honey or Sugar*, make a Syrup.

There are others for the ſame, which may be boyled with the former, as Daffodil roots, or Avens, or Beatfoot, or Mary-thiſtle, or Lady-gloves, or Hog-fennel roots, the Leaves of Comfrey, Golden-Rod, Avens, Plantane, Adders-tongue, Strawberries, Mullein, Primroſe, Bears ears, Orpine, Yarrow, Tanſey, Hemp, Sage, Calaminta, and the reſt mentioned in Wound-drinks.

The Arabians commend a Goats head boyled with the Hair, and the Hair of an Hare boyled.

You may make a Wine with the Infuſion of the beſt of the things mentioned, being dryed, and it will be leſs diſtaſted, and drunk longer.

Some Juyces drunk, do the ſame, *one ounce at a time, with Wine, or other Liquor, or boyled thick, to an Extract, one dram at a time: Or with Honey or Sugar made into a Syrup*, and given *one ounce and an half*.

The Juyce of Rupturewort is beſt, then of trinity Violets, and Oſmond Fern, and of great Comfrey roots, and *one dram* of the Juyce of Gentian roots according to *Dioſcorides*, and the Juyce of Butchers broom, the Juyce of other Plants mentioned in the Decoction; alſo the Juyce of Laſerpitium.

The ſtilled Waters of Ladies-mantle, Comfrey, Horſetayl, Plantane, red Roſes, and others mentioned, drunk alone, or with other Remedies.

There are alſo Potions for the Rupture, made of *one dram* of pouder, with red wine, or a Decoction, or ſtilled waters, or with water and Milk for Children, or with a rear Eg, or the like, with Sugar, or Honey, if you pleaſe.

As theſe following, ſimple, or mixed, the chief is of Rupturewort, and Horſe-tongue roots, of the Leaves of Adders tongue, of Roots of Swordgraſs, wild Orris, or three coloured Violets.

Alſo the pouders of Horſtayl, Shepheards purſe, Ladies-mantle, Thorow-wax; alſo of the Roots of Comfrey, Valerian, Birthwort, Snakeweed, Tormentil, five leaved Graſs, Briony.

Alſo *Dioſcorides* commends the pouders of other Herbs, as of Bettony, Liverwort, Cuckow bread, Balſom, Woodbine, Marygolds, Rock Comfrey, Burdock roots, Elicampane, Lovage, Seeds of Watercreſſes, and Countrey Muſtard, and of other Plants mentioned for Decoctions.

Alſo the pouder of Earth worms, and of the worms of Byzant, the Filings of Steel, of the Bloodſtone, Amiantum, and of Oſteocolla, which glews bones together. Alſo of Fat Earths ſealed, and other dryers.

Alſo the pouders of Troches of Amber, Ivory, or Bole, or of Diacydonium, made of Quinces without the Species, with ſome convenient Liquor.

Theſe may be taken in pouder with Sugar, or made into Lozenges with the ſame, with proper waters, and things good for the Stomach, and to expel wind, for that fills the Guts, and increaſeth the tumor.

As, Take *Coriander ſeeds prepared, one dram, Caraway, or Cummin, and Water-creſs ſeeds, each half a dram; Rupturewort one dram and an half, Horſtongue, or Adders tongue, or Horſtayl one dram, Comfrey roots, Pomegranate peels, each half a dram; Bole one dram, red Coral half a dram, Sanguis Draconis, the Aſhes of a Bulls, or Stagg pizzle one ſcruple, Cinnamon one dram, Sugar of Roſes*, as much as all the reſt, *or with more Sugar diſſolved in Roſewater*, make Lozenges.

You may make Electuaries of the ſame pouders, with *Conſerves, Candies, and Syrups, or Extracts two drams* to be given with convenient Liquor after it.

Or thus: Take *Conſerve of Comfrey, and Daffodil roots, each one ounce and an half; Conſerve of Rupturewort one ounce, old Conſerve of Roſes, and of Acorns, each ſix drams; Conſerve of Sage, or Stachas, French Lavender half an ounce, Coriander ſeeds prepared, and Fennel ſeeds, each half a dram; Amber, Maſtick or Frankincenſe, each two ſcruples; Bloodſtone half a dram, Cinnamon one dram and an half, with Syrup of Myrtles*: make an Electuary. To which you may add ſome of the aforeſaid pouders.

You may alſo make a Mixture of divers Pouders mentioned, and give *half a dram*, or *two ſcruples* like Pills, every day, becauſe they are unpleaſant.

Thus: Take *Comfrey, Madder, Tormentil, Birthwort, Rhubarb, and Briony roots, each one dram and an half; Rupturewort, three coloured Violets, Horſtongue, Adders tongue, Shepheards purſe, Ladies-mantle, Horſtayl, Water-creſſ ſeeds, Mummy, Byzantine worms, Bole, Coral, each one dram; Gum Arabick, Sarcocol, Maſtick, or Frankincenſe, Amber, each half a dram*; make *a Pouder, and with Syrup of Myrtles, and Infuſion of Gum Tragamh*, make *a Paſt*.

You may with all the other pouders make up as excellent Medicines, as the former.

The uſual Pills for the Rupture, are thoſe of Bdellium.

Or theſe: Take *of Bitumen, or Mummy two drams, of Bdellium, Galbanum, or Sagapenum, and Myrrh diſſolved in Vinegar, each half a dram; Pouder of Steel prepared one dram, Hares dung dryed, half a dram, Pouder of Earth worms one ſcruple, with boyled Juyce of three coloured Violets, or of Rupturewort, with Honey in form of a Syrup*: make *a Maſs, the doſe two ſcruples, or a dram.*

Others

Others commend the Dung and Hare of an Hare cut small, and boyled in Honey, given one dram at a time.

There are divers outward Applications for a Rupture, whether the Rimme be broken or loosned in the Groine or Navel or any other part, which by binding do astringe the Relaxation or Loosnes in the Groine, and if it be broke do unite the Lipps of the Wound, to which you must add Healers, by which (though the Rimme cannot grow together,) yet new flesh may breed, which may stop up the Passage, as the Astringents or Binders make it straighter. That this may better be effected, you must use all means to keep up the Guts, least they return to the part to get out, and so hinder the uniting of the part. Therefore during the Cure, for a month or more, let him either lye upon his Back, or wear a Truss continually, and take heed of all things mentioned which force the Guts down.

These Applications are by Plaisters, which will stay on, and which must be renewed.

As this. Take *the Roots of Comfrey and Snakeweed, each three drams; Birthwort two drams, Galls and Cipress-nuts and Pomegranate peels, each two drams; the Leaves of Misleto of the Oak, Pomegranate flowers and red Roses, each one dram; Aloes, Sanguis Draconis, Juyce of Sloes or Acacia, each one dram and an half; dryed Earth-worms one dram, Frankincense, Mastick, Myrrh, Sarcocol, Mummy, each two drams; Pitch, Colophony, each half an ounce; Bole, Lytharge and Blood-stone, each half a dram; Plaister of Paris burnt three drams, Rosin of the Firre, or Larke-tree, or Pine-tree*, as much as is sufficient, pouder what is to be poudered, and let the Gums be dissolved in strong Vinegar, and so make a Plaister; or with Oyl of Quinces, Mastick, or Myrtles, and a little red Wax, make a Cerot.

To these you may add the Roots of Daffodil, Plantane, Water-lillies, the Leaves of Rupture-wort, Acron-cups, Myrtle seeds, Gum Ammoniack, Bdellium, Galbanum, Serapinum, Traganth, Arabick, Amber, Load-stone, Steel, and Iron filings, Allum, Vitriol; also Pouder of Oak moss, of Toad-stools, red Snails, Hedghogs skins, Hares hair, Bazantine-worms; also dryed Mans blood, Glew, or Mucilage, which is made of Sheeps skins boyled with the Hair. All or some of these with those aforesaid may be made into a Plaister, or with the Oyls mentioned or the like (in which Shepheards purse, Juyce of Plantane, and other Astringents, and Vinegar have been boyled) make a Cerot.

Other Emplasters without Oyls, which dry sooner and stick faster, do not only potentially astringe, but actually by pressing the place, are thus made. Take *Frankincense, or Mastick, three drams, Bole and burnt Plaister of Paris, each two drams; Aloes, Sanguis Draconis, each one dram and an half; Galls or Pomegranate peels, Cypress-nuts, and Roots of Birthwort or Snakeweed, each one dram; or burnt Earth-worms, and the Hair of an Hare, each half a dram*; make a Pouder, and mix it with the White of an Egg, and Vinegar, or Glew of Fishes, or beat them being softned and dissolved in Vinegar, and apply it with Cotton, renewing it twice or thrice in a week.

A Plaister of Pitch and Rosin may be long worn, and changed when it itcheth or falls off, to which you may ad astringent Pouders.

That Plaister is most usual, which is made of Sheeps skins, called the Rupture-plaister of Arnoldus, made of Lytharge, Blood-stone, Bole, Gums, Frankincense, Mastick, Ammoniack, Galbanum, Myrrh, Pitch, white Wax and red, Turpentine, with Juyces, as Aloes, Sanguis Draconis; of Sloes, Opium roots; as of Comfreyes, Birthwort, Pepper, Flowers of red Roses, Pomegranates, Misleto of the Oak, Galls, Earth-worms, Mans blood, and Sheep-skins.

Also the Plaister of Mastick, especially against Wind, mentioned in Weakness of the Stomach.

The Countess her Oyntment called *Comitissæ*, is astringent, and here may do good.

There are other Applicatations of Plants boyled in red Wine. As,

Rupture-wort boyl'd with Comfrey roots.

Osmond Fern, also boyled, with Horsetayl, and Shepheards purse; also Galls, Cypress-nuts, and Pomegranate peels.

The Leaves of Misleto of the Oak, or instead thereof Pear-tree leaves green, wit. Dewy seeds of Misleto, with Comfrey roots, St. Johns-wort, Sanicle, and Bettony, are good boyled and beaten.

Besides these some commend the Pouder of dryed hemlock, mixed with the white of an Egg, and so applied.

Also Bdellium made soft with fasting Spittle, sharp wine, or Vinegar, is highly commended.

Lupines burnt with a Linnen rag are applied with wine to the Navel-rupture.

Astringent Fomentations are with a Spunge or clout dipt often in a Decoction, very hot to be applied, they are made with astringent Wine and Vinegar, or Lead, or Iron-water, of the simples following, Roots of Snakeweed, Tormentil, five leaved Grass, Madder, Daffodil, Herbs, as Rupture-wort, Horse-tayl, Plantane, St. Johns-wort, Mullein, Rock-comfrey, Oak leaves, Bar-berries, Sumach, and other Astringents, as Pomegranate peels, Cypress-nuts, Rose flowers, Coriander, and Water-cress seeds parched.

To which you may add things to expel Wind, least it drive the Guts out, as Rue, especially the wild Rue, the topps of the lesser Centaury, and of Rosemary, common or French Lavender flowers, Cummin, Caraway, and Fennel seeds.

And to these, if you add of Vitriol and Allum, each one ounce or more, it will be stronger, of which alone with Bole, and burnt Plaister of Paris, you may make a Fomentation.

Some commend the Liquor found in the Leaves of an Elm.

Cutting is the last Remedy, which is proper in the Rupture, and Loosnes of the Rimme of the Belly, and when the skin is laid open, you may lay hold upon, and bind the Rim, yet because it is dangerous and painful, it is to be used only when all other things fail, and then not rashly, and except the Tumor is very troublesom, and slips out easily, and is exceeding painful, and we fear least when the Guts are out, they cannot be put in again. Otherwise it is better to use a Truss, which with little trouble takes away pain and danger. This cutting is said to cure Ruptures, for the skin being open in the Groine, the Mouth of the Rimme being torn, or broke nor relaxed, may be bound together; and the Passage so stopt and held together by the string till the flesh grow up, least the Membrane should open again being united, which will not grow together. And this cutting will cure other Ruptures, although in other places the Rimme is not so easily laid hold on and tyed, yet the flesh that grows may stop the Passage.

That this may be done handsomly in the Groine, where it is most usual, after you have implored the Assistance of God, because it is is dangerous; you must place the Patient upon a table with his Face upwards, and so tye him that his Head may be lower then the rest of his Body, and his Feet higher. And if the Guts be in the Groine or Codd, they must first be put up, and the tumor pressed down, and after the skin must be drawn up, and cut in the length of the Groine, and you must take hold of the Passage of the Rimme, which descends from thence into the Codds and contains the Seed Vessels, and separate it, by drawing or cutting from the parts adjacent to which it cleaveth, and tye it strongly with a hempen thread, leaving the ends of the thread hanging out, and you must cut off the Passage below the thread, and pull it away with the Seed Vessels, and the Stone that grows thereto. Then you must place him upon a Bed, and lay him upon his Back to rest till the Wound be cured, which is done as other wounds with washing and good Ligature. And it will not be amiss, before you cut, to put the Patient into a mollifying Bath, that the Guts may be better put up, and for the better success in cutting.

Alſo this cutting may be without Gelding, (which all deſire,) if the Chyrurgion be a good Anatomiſt, and can ſo tye the Paſſage ſeparated from the Seed-veſſels, that no other part be tyed therewith.

Some have attempted this by a prick without cutting, they pierce the upper part of the Codd with a long Needle, through the Paſſage of the Rimme of the Belly, and draw a thread after it, and ſo ſay that they can ſtop the Paſſage by tying of the thread, and cure the Patient without loſs of Stone or Seed-veſſels.

I have often heard that a Rupture might be cured without cutting, but while I write theſe things, there came to me very ſeaſonably a French Surgeon, which I ſaw performed the Cure with good ſucceſs by this way. And being it is without pain, or but with very little, and without loſs of Blood, it is the beſt and ſafeſt way. And in regard the Veſſels may better be ſeen and felt without Blood, it is the beſt way for males, to prevent Gelding.

He applied a potential Cautery, a little above the ſtone on the Rupture ſide, where the paſſage of the Rimme goes into the Codd, ſo large that it mortified the skin half a fingers length and breadth, making an Eſchar or Scab which he took off, and applied another Cautery, till the skin was all taken away and the fat appeared, which he cut off, ſo that he could perceive the paſſage that carried the Seed-veſſels. This being done in two dayes time, he handſomly ſeparated the Veſſels from the paſſage, and with a crooked Needle conveighed a thread underneath, and ſo gently tyed the paſſage without pain, and after the thread fell off in time, he with incarnative or fleſh-breeding Medicines, produced a Callus or Hardneſs, which grew the better to the paſſage, becauſe the ſecond skin to the Teſticles called *Erythroïs*, is red, fleſhy and muſculous. And ſo by preſſing down, and filling up the place where ſubſtance was loſt, he ſtopped the paſſage by which the Guts came forth, and ſo he performed the Cure perfectly and happily without Gelding. And I underſtood by Letters, he brought to me, that he had cured divers the ſame way.

In other parts you may not uſe cutting or burning for a Rupture as in the Groine, becauſe you cannot ſo eaſily lay hold of the Rimme of the Belly and bind it; yet it may help ſomtimes, eſpecially becauſe proud Fleſh will ſooner grow, while a wound is healing: as I ſhewed. And this muſt be done when the Patient is upon his back, by an Inciſion upon the tumor, or a Cauſtick, and by other Applications for the Cure.

The Cure of the Falling out of the Womb.

Somtimes the Womb and neck thereof falls out of the Body, when the Connexion of the Neck is diſſolved, as we ſhewed, which can ſcarce be repaired, and then the Cure is difficult, and if it be old, becauſe the parts ſeparated are grown hard and cannot be cloſed, it is impoſſible. The greateſt hope is when the Womb is not quite fallen out, but hangs in the paſſage, eſpecially when it is deep, for then the ſmall Veins are leſs divided. Nevertheleſs, for the Cure perfectly or imperfectly, firſt you muſt conſider the Cauſe and then the Diſeaſe.

The Cauſe of Falling out of the Womb muſt firſt be removed, by keeping them at reſt, or with little motion, and from immoderate Venery, and preventing neeſing, coughing and roaring. And if ſhe be with child, give her things to help the Birth, when it is at hand. And let her Body be alwaies kept ſoluble by Meats and Medicines, to avoid ſtraining. And it is better to purge ſo, then to uſe moiſtning Diets, which cauſe the Ligaments to be looſe, and the Womb to fall out. And if the womb be moiſt, or ſhe have the Whites, you may give ſtrong Purges to take away the ſlipperineſs of the part which cauſeth the womb to fall forth. Thoſe Medicines are drying alſo: as we ſhewed in the Cure of the Whites, otherwiſe purging or bleeding do little good for taking away the Cauſe, except to keep the Body clean.

The Cure of the Diſeaſe which is twofold, namely the Diſlocation of the womb and the neck thereof, and the ſolution of Continuity, is to put the womb into the right place, and keep it there, and to unite it to the Parts from which it is divided.

The womb muſt be put up, and for the better performance there of, you muſt take away firſt the Excrements from the Guts and Bladder, leaſt they ſtraiten the paſſage, becauſe the neck of the womb lyeth upon the ſtraight Gut, and the Bladder upon it.

This done, you muſt lay her upon her Back, with her Thighs abroad, and her Knees up, and with her Hands thruſt in the bottom of the womb into the neck, till all be put up. Or let the Midwife help her; or let her have a blunt ſtick with a clout at the end, which will paſs farther in. Or let her make a Peſſary of Linnen for the ſame purpoſe. Thus did I two years together, put up the womb which could not be done by any other Art, as the Butchers do the Guts of Beaſts, and ſhe yet liveth, and hath had Children in the time.

I have alſo happily cured oftentimes the turning out of the Womb after hard Travail, by the help of Midwives which I inſtructed, with a bag of wool ſtuffed with ſweet Roots, Herbs and Seeds.

And if there be a Swelling that hindereth the putting up, you muſt firſt take it away; or an Inflammation, or Wind, you muſt diſcuſs that, as we ſhewed in the Rupture.

Anoint the womb with Butter, Oyl, or Greaſe, that it may get in the eaſier, but if there be no neceſſity avoid them, becauſe the womb will ſlip out again the ſooner: which to prevent, uſe Aſtringents, that they may make the part rough, for the keeping in of the womb and its neck in its place, after put up, or when it is in danger to fall out, & that they may grow to the Parts adjacent, we uſe divers things, Aſtringents, Dryers, and glewing Medicines which make a perfect Cure, or things that only keep them up, and then the Cure is palliative and imperfect. They are inward and outward to the neck of the womb, when it is forth, or things conveighed into the Privities or Scents.

You may make tryal of things preſcribed for Ruptures, and Wounds.

Beſides which, this Pouder often taken is excellent. Take *the Roots of Mullein two drams, Leaves of Myrtles, Parſnip ſeeds, each one dram, Harts horn half a dram, Aſhes of Cray-fiſh or Crabs one ſcruple, red Coral two ſcruples*: make a Pouder.

Divers things are applied before, behind and below the womb while it is in, to dry it, and bind it, to the Parts adjacent, that it may not fall forth, and ſuch as ſtrengthen.

This is done by Fomentations about the Loyns for many daies. They are made by boyling theſe following in Forge-water and Wine, or Vinegar ſomtimes, Roots of Snakeweed, Tormentil, five leaved Graſs, the Budds of Oak, Pear-tree, and Sloes, Medlers, Brambles, Myrtles, Maſtick-tree, Ciſtus, Pine-tree, Cypreſs, Bayes, Shepheards-purſe, Vervain, Mullein, Yarrow, Blood-wort, Ivy, Solomons Seal, Rupture-wort, Wormwood, Centaury, Mugwort, Rue, Bettony, Lavender; alſo the Peels of Pomegranates, Acorn-cupps, Galls, Sponge Bedguar, or Lady-thiſtle, Cypreſs-nuts, Lentils, Peaſe, Myrtle-berries, Bay-berries, red Roſes, Pomegranate-flowers, Lavender-flowers, Sage and Roſemary; alſo Moſs, or Lungwort, ad to the Decoction of all or of ſome of theſe, Allum, or Salt, or Vitriol, Bole or Plaiſter of Paris, or Filings of Iron.

Alſo Natural Spaw-waters of Vitriol, Allum, Salt, or ſuch as petrefie or turn to Stone, and when they are boyled, leave much Chalk upon the Veſſel, being drunk for a month together, or more, are very good. For though they ſeem to moiſten, yet are they potentially drying, and by reaſon of Sweating, they conſume the Humors, and by the Effect we perceive that they dry and aſtringe by the wrinkling and Roughneſs of skin which followeth.

Oyntments or Plaiſters to be applied to the Womb about

bout the Privities and Loyns, are as follow. Take *Roses of Snakeweed two drams, Roots of Cypress, Rupture-wort, and Moss, each half a dram; red Roses and Pomegranate flowers, each half a dram; Galls, or Pomegranate peels, or Acorn-cupps two drams, Cypress-nuts, Dates stones, or Myrobalans burnt, each one dram; Myrtle seeds half a dram, Frankincense, or Mastick, Acacia, or Juyce of Sloes, each one dram; Spiknard half a dram, red Coral one dram:* make fine Pouder, *and with Oyl of Myrtles, or Mastick, and the third part of Oyl of Bayes, Turpentine, and Wax,* make an Oyntment, or with Rosin, Pitch and Colophony, make an Emplaster.

Another Oyntment which is mentioned to anoint the Privities, to prevent Abortion. Take *Oyl of Roses &c.* and the two Oyntments that follow made of pouders, are also good.

The usual Oyntments and Plaisters for other Fluxes of the Mother, are also good against the Falling out of the womb. As that of the Countess, the Emplaster of Mastick, and against Ruptures and the like.

Also Cataplasmes made of the remainder of the Decoction, beaten with the Oyls mentioned.

Dioscorides commends Nettles applied, being green and bruised.

You may fill Baggs with the remainders of the Fomentations, and apply them.

Great Cupping-glasses or three or four little ones to the Belly under the Navel, often applied, will help to hold up the Mother.

Some things are applied outwardly to the womb and the neck thereof, which after they are put up, will astringe and wrinkle the part from whence the womb fell, and keep it from falling out again, which are of a drying and glutinating Quality.

We may use Fomentations made of things mentioned, and Roots of Comfrey, Daffodil, and other things mentioned for healing of Wounds: as Frankincense, Mastick, or other Gums.

When we will bind more, and there is no hope otherwaies, by reason of the Continuance of the Disease, we must foment the part with a Spunge dip'd in red Vinegar, Lye, Salt or Allum-water.

Or apply a Clout dipt in water of Nuts, or of Pine-apples.

You must sprinkle pouders after you have anointed the parts with Mucilage of Comfrey, or the Infusion of Gum Tragasith, or Glew that is made of boyled Bran, which must have no Roughness, least they lying under the womb hurt it after it is put up, and they must be more glutinous then Astringent, as this. Take *of Frankincense or Mastick, one dram and an half, of Sarcocol steep'd in Milk one dram, Gum Arabick, Juyce of Sloes, each half a dram;* pouder them.

You may use this pouder with the Mucilages aforesaid, or of Quince seeds, or with Oyl of St. Johns-wort, or the like, that consolidate or glew things divided, mentioned in Wounds.

These following are put in, and injected into the womb, which hinder Falling of it out, by astringing, and drying and straitning the passages.

As Pessaries long and thick, so fastned that they may be worn when they walk.

They are made of the Oyntment mentioned, with pitch, into a hard plaster, in such a form as may fil the womb, with other Gums dissolved in Vinegar, as Galbanum, Bdellium, Sarcocol; also Opopanax half an ounce. To which they add stinking things to make the womb fly up, as Assa fœtida, which is not necessary, because it will distaste the woman, and discover her Disease by its Scent.

Those Emplasters which cure the Rimme of the Belly by increasing flesh, as we shewed, may do well here in this solution of the Continuity of the small Fibres or Veins.

You may make other Pessaries of pouders in the aforesaid Oyntments, if they be first mixed with the white of an Egg, the Infusion of Gum Traganth or Mucilage of Comfrey or of Quinces, and put into a bag.

And if these Pessaries be troublesom, you may make others as big as your finger for the night only, of the same things.

Or you may wet wool in Vinegar, and the white of an Egg, and sprinkle the pouders thereon, and put it in.

Another Pessary prescribed for the Whites, begins thus. Take *Galls or Acorn-cupps, &c.* is good here.

Some commend an Eg that a Hen hath sitten upon some daies, beaten and put up with wool.

There is a way among women to keep the womb from falling out, by carrying a round Ball therein, which must be so big that it fills the Privities, and not be put in by great force. It must be smooth, slippery and light, that it may not hurt the tender parts with its roughness or weight; and hard, that it may better hold up the womb, and dry, that it may take in no Moisture, least it fall out again. It is made thus of Cork, or Beets, by glewing two pieces together, if one be not big enough, brought into a ball, or a bottom of thread, and let it lye in melted wax, till it be covered over therewith. Which she must thrust up with a string fastned thereto to take it out; and let her wear it day and night, and not take it out but when she is to use a Man. This though it be a little troublesom, yet it is better then to have the womb fall out.

This trick have I shewed to many women in a miserable Condition, which hath cured them, among whom one which a long time before had not known her Husband, conceived with the ball in her womb, which she voided when she was delivered of a Boy, with her Secundine or after-birth.

You may use Injections with a Syringe for the same, made of the Decoction mentioned for a Fomentation, and this is best.

There is a strong Injection made of few things. Take *Galls three ounces, Moss two ounces, Comfrey roots one ounce, Vine ashes two drams:* boyl them in Forge-water, and the third part of red Wine, for an Injection.

There are also Fumes for the same, made of the same Decoction, for a Fomentation hot, which is very piercing and good.

As those of Comfrey roots, Snakeweed, Cabbage stalks, Box topps.

The Fumes of Frankincense, Mastick, Amber, Labdanum, Bitumen, Pitch, Colophony, with stinking things, are stronger, as Galbanum, Castor, and that abhominably stinking Divels Dung, with other astringent Pouders, or they may be made into Troches with Rosin.

Orpiment is very drying, but in regard the smoak thereof is hurtful, you may better use Varnish.

That Fume which is prescribed for the Whites that begins thus. Take *Mastick two drams, Frankincense &c.* is good here.

Experience teacheth, that the Smoak of dryed Cow dung is very good.

And the Hoof of a Mule burnt doth the same miracles, with the Smoak in this case.

Many things mentioned to stop the Terms outwardly or inwardly, are good here to astring; but it is better to forbear, them least they stop the Courses, except the time be past.

They suppose that the womb follows sweet things, and flies from stinkes, and therefore they apply the sweets to the Nose, and the stinkes to the Privities.

Somthing vomiting will fetch it up, but it is too forcible, and so is neesing, and rather presseth down the Entrals.

The womb is kept up by lying down, and while the woman is so, it remains in its place.

Also Conception keeps the womb from falling out, and while she is with Child it cannot fall down, because it grows larger with the Child, and cannot fall out till after Child-birth, it grows little again.

The

The Cure of the falling out of the fundament.

The Fundament by straining, and the straight Gut may be turned out, and sometimes it will return again with ease, but if this be at every stool, and the Patient weak and the Muscles relaxed, it is hard to be cured, and not at all, if it be torn from the Membranes, to which it was fastned. For the Cure first begins at the Cause, and then look at the Disease which is the falling out of the Part.

To avoid the Cause, if straining at stool, be it, keep the Body loose with Clysters, and Medicines and good Diet. If it come from hard travail, or from cutting of the Stone it will be gone when they are over. Then you must have a care to put up the part, and keep it in by divers means.

The Fundament is put up, by the Hand of the Patient, or of the Surgeon, pressing with his fingers, or with a clout for that purpose. And if it be swollen or inflamed, which hindereth its going up, you must first cure them. As we shewed in the Falling out of the womb, when it is swollen.

We keep in the Fundament that it fall not out again by divers Remedies, either such as astringe and stop the Passages, or that unite the separated parts, or by things which amend the temper of the Fundament when it is too cold or weak, or loose and relaxed, by which means it cannot keep up. And this is done by things given inward, or applied outward to the Fundament or injected into it.

If it come from Solution of Continuity, you may give somthings prescribed in the Falling out of the womb to consolidate or heal, but abstain from strong Astringents, least you make the Belly more hard, and cause greater straining, which will force it forth. But if the Fundament come forth by loosness through the Falling down of an humor, you must use things that purge and alter which are mentioned in the Palsie.

The same things that are prescribed by way of Fomentation and Pouders, for the falling out of the womb, may be used for the falling out of Fundament and straight Gut, and they will do the same by holding up and fixing the Part.

You may also use other pouders, such as were used to the womb in form of a Pessary, as a Suppository, here anointing before; As we shewed, least they should by their sharpness get forth again.

Or this pouder. Take *Galls two drams, Pomegranate-flowers one dram and an half, Mastick, Frankincense, each one dram; Amber, Sanguis Draconis, each half a dram; burnt Harts horn, and Antimony, each one dram*: make a fine pouder.

You may add Bitumen, Pitch, and Cockle shells, salt-fish, Dogs dung, and Hogs bristles, and the like burnt.

Or take some of the pouders, mentioned in the Oyntment for the Falling down of the womb, or anoint the fundament when it is forth, with that Oyntment.

Fume or Smoak is best, because the thick and moist things will not be so well retained, as that prescribed for the Falling out of the womb, especially that of the Decoction of Mullein, with Vinegar, or that of Vinegar from a hot piece of a Mil-stone.

Also the Fume of Gums and Rosins, there mentioned, leaving out the stinking Gums, as Devils dung, and Castor, adding Bdellium, Juyce of Sloes, and other Astringents, and Spices, and Galangal, Cypress, Cloves, Mace, Nutmeg, Roses, and Flowers of Mullein.

You must foment the part and the Loyns, with astringent and healing Decoctions, if the Connexion be divided, and if there be weakness or coldness in the Muscles, with things that cherish the Natural heat, and strengthen the Nerves.

These are made of the Decoction of astringent Plants, and such as heal, mentioned in the Falling out of the womb, boyled as there, with warm things, and proper for the Nerves, as Groundpine, Sage, Primrose, Wormwood, Horehound, Bettony, Penny-royal, Chamomil, Rosemary, and Lavender flowers.

Spaw-waters mentioned for the falling out of the womb, are here good also.

When the Fundament comes forth in Children from Cold, it is good to set them upon a piece of green warm Oak, which is astringent and good for men also.

The Oyntments and Plaisters there also mentioned, are good here for the Loyns and Fundament, to which if the Nerves and Muscles be weak, you may add hot Oyls, as of Pepper-wort, Bayes, Spike, Foxes, Castor; also pouder of Pepper-wort, Galangal, Cypress, and other spices, and among other Plaisters, Oxycroceum and Ceroneum.

You may also make Cataplasmes of the remainder of the Decoction mentioned, or thus. Take *Rupture-wort, dry Mosse, each half an ounce; Galls one ounce, Orobus, and Lupines, or red Pease pondered two ounces, Roots of Sowbread half an ounce, Groundpine two drams, Dung of a Goat, Pidgeons, or Swallow, or Lizards one ounce, with Oyl of Myrtles, or Juyce of other proper Herbs*, make a *Poultis*.

Dioscorides saith that the Cramp-fish applied is good.

You may also apply Baggs, as in the falling out of the womb, or other hard Pillows to press the Fundament up, when they are sitten upon or tyed hard thereto.

The Cure of the hanging out of the Tongue.

The hanging out of the Tongue is commonly from some deadly wound, and if it be cured, it is by preventing worse accidents.

The Cure of the hanging out of Stones.

If the Codd be cut, and the Stones hang out, it is easily cured, by putting them up, and keeping them so, without sowing or stitching.

The Cure of the Eye thrust out.

The Eye falls not out but by some violence used to it or the Head, and because death commonly follows, we meddle not with it; and if the Party liveth, it cannot be rightly restored without wrinkling and blindness, by the Astringents that are to be applied, to fasten the Eye in its place.

CHAP. III.

Of Efflation or Sending forth of Wind.

The Kinds,

WE call that Efflation by which not only wind is sent forth from whence the word is derived, but when breath or air is sent forth, the Efflation of breath by the Mouth and Nose is Expiration, but the Efflation of wind by the mouth is called belching, and by the fundament farting, these are preternatural, when they are depraved or stopped, or vitiated or corrupted, or when they break forth by an unusual way.

Preternatural Efflation or sending forth of wind.

The Expiration or Breathing is depraved when it is interrupted, or too violent, or too long, or with a strange noise, or with other Excretion, not only of Air but, Matter, in a short breath, Sighing, Yawning, Hickets, Neesing, Cough, Blowing the Nose, Spitting, Hawking, Vomiting: as we shewed in Respiration depraved.

To this is Snorting referred, when the noise is so troublesom, that others cannot sleep for it. This is also in some Diseases when men are awake, as the Apoplexy, Fallingsickness, and difficulty of breathing; as we shewed in those Diseases.

Belching and Farting.

When wind is senth forth by the mouth in Belching, or by the Fundament in Farting by reason of its strange sound and stink, it somtimes is depraved, and that rather when they

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may be restrained, hence are these sounds more indecent then others in depraved Respiration mentioned, though they make a noise, as in the Cough and Snorting, because these cannot be restrained.

Rumbling and noise in the guts

To these preternatural Sounds may be added those winds that presently come not forth, but rumble first in the Belly, under both sides, but especially the left, and if they sound like water, they are called *Fluctuations*, if they rumble, *Murmura*, and if they croak, *Rugitus*; sometimes there is a noise like Froggs or the like, and some imagine them to be really there. These noises are usually in Virgins and others, and are signs of Diseases in the Stomach and Guts. Also there is sometimes a noise about the Navel, with a Swelling that moveth; this is usual in sound people, before stools or farting, and in the Colick: as we shewed.

The other strange Noises, as in the Belly of them that have the Dropsie, wheesing in the Breast, beating of the heart, which may be heard as well as felt. The divers noises in the Ears, because they break not forth of the Body with wind, do not belong to the Efflations or Sendings forth of wind, but to other Diseases where they shew themselves, and where they are described.

The Breathing is faulty when it stinketh.

A stinking Breath.

As when the Breath smells of Excrements or of dead fish, or rotten Cheese or the like, mentioned in a stinking Breath. This is troublesom, and better known to the standers by then the Patient, and it is most when he is fasting, and sometimes it is constant; sometimes after eating of divers Meats, or Drunkenness, staying but a while; sometimes it is the Symptom of Diseases, or fore-runner, when without any other manifest Cause, they are said to begin to be sick from the Scent, which the Germans call *Stechesen*.

Stink of the Nose,

The Breath that comes forth at the Nose, when it stinks, causeth the Disease called the Stink of the Nose, which is intollerable to the Standers by, and makes them that are troubled therewith to be shunned.

The Stink of a belch or fart

There is in belching a sending forth of wind that is corrupted, like the smell of roasted flesh, and sometimes stinking. And in breaking of wind downwards, by which the Stink of the Excrements comes forth, there is sent and most often stink.

An evil scent from a wound.

Sometimes Breath comes out at an unusual Passage, not by the nose and mouth, but through a Wound in the Breast or Neck. This may be felt or perceived by a burning Candle held to the wound.

Sometimes wind comes forth of a wound in the Stomach or Belly not at a distance, as breath, but together suddenly.

The Causes.

The Cause of all preternatural Efflation, which is the depraved Sending forth of Breath or Wind, is the disorderly breaking of them forth, or the Corruption of the same.

An inconvenient Breathing, is the cause of preternatural Efflation.

How from the disorderly breaking forth of Air or Breath, through the rough Artery into the Mouth and Nose, Expiration is depraved, and there is a Noise, was declared in the Causes of depraved Breathing.

Snorting is caused by air drawn in, and sent out at the Nose.

Also Snorting comes from the forcing out of Air drawn in at the Nose, especially in those that have Apes-noses, and the Passages of the Nostrils straighter, or when the Bridge is fallen by other means, or when some part is stopped with Snot, then the sound being broken causeth that called Snorting, especially in sleeping, when the Mouth is shut, and the Air drawn in at the Nose, or if the Party lyeth upon his Back, for then the flegm falls easier down, and sticks there; which causeth a Snorting in some Diseases, when it comes to the Nose, and stops there, as in an Apoplexy, falling-sickness &c. This Symptom is constant with them, for the Causes mentioned in those Diseases.

Breath or wind breaking at a wound, is the Cause of preternatural Efflation.

When there is a wound in the rough Artery or Breast, the Breath comes forth at an inconvenient place. These wounds are made on purpose in the breast in an Empyema, in the rough Artery in Squinzie, or by chance, as was there declared.

And if the Stomach or Belly be wounded, wind will come forth, as when we cut for the Dropsie, or when a wound is there by chance.

When wind breakes from the stomach at the mouth it causeth belching.

Belching comes from wind rising up from the Stomach through the Gullet and Mouth, and when it goes downwards through the Guts to the Fundament, it causeth farting, making the greater noise by how much they are more forced. And if these be shut up in the belly, they run through the Cavities, and cause a Rumbling in the belly, especially about the left side, if they be in the belly, or the Colon which lyeth under and is joyned to it. For these parts are chiefly on the left side (albeit some think it is from the Spleen which cannot be fill'd with wind) or if they be about the navel or other parts they wil cause noise, because the Guts are thin about the Navel, we have shewed the Cause of these winds in divers Diseases of the Stomach and Guts, among which the strait lacing of Virgins to seem slender is one, for so the wind constrained causeth noise, and many times disgrace.

From the Guts by the Fundament farting.

When it is included in the belly, it causeth Rumbling.

Wind with an humor in the stomach and guts, is the Cause of Fluctuation.

Besides these simple Winds, if there be another Humor therewith, there is then a Fluctuation, or sound of water with the croaking, or if it be water alone, it will be only fluctation. And as this may be from divers Causes mentioned in Diseases of the Stomach, so often from water-drinking and the like, when the Body is stirred, and the Belly pressed.

A stinking Breath comes from the Infection of the same with things that have evil scent, as also that stinking of the Nose and Mouth, and then Belchings and Farting will be very stinking, which comes from divers things taken and from Excrements.

The Infection of the breath by things chewed, is the cause of the stink thereof.

Some things taken that have an ill Scent, infect the breath, especially if they stick in the Teeth, and in the Stomach, the the scent riseth to the Mouth, as when you eat Garlick or rotten Cheese, and the like which, though not so bad is distastful to the Standers by, as belching from wine in drunkards, or from fat meats. Many other things not ill scented but by their Corruption, do infect the Breath: as flesh in a hollow tooth, or between the teeth, if it continue long and corrupt and rot. Also flesh corrupting in the stomach, may cause a stinking Breath, and other things that of themselves are not ill scented, corrupt in the Stomach which is usual, as Raddishes, and cause a stinking belching and breath.

The stink of the Excrements, is the cause of a stinking Wind and Breath.

Also stinking Excrements, being in the Stomach or Guts, sent forth evil Scents, as when they are out. Excrements in the Guts are Naturally stinking, especially being cholerick

or mixed with other evil Humors, and they ſtink not only when they come forth, but by Vapors which come from them, they diſcover their evil Scent.

Alſo a ſtinking Breath may come from the Excrements of the Belly, when the Stomach is too open, eſpecially the Pylorus or Orifice thereof, which opens into the Guts, and then the ſtink of the Excrements gets into the Stomach, and ſo into the Mouth, and infects the Breath. And this we take to be the chief cauſe of that ſtinking breath which ſmells like Excrements, which continueth ſo long, becauſe it comes from a fault in the Organ or Part called the *Pylorus* and Stomach which is ſcarce repaired.

This is occaſioned by long ſuffering, by which the ſtomach is ſo looſe, or ſo weak: as we ſhewed in the Weakneſs of the Stomach.

Some Excrements in the Stomach that ſtink and are bred there, or brought thither, do ſend their ſcent through the Gullet to the Mouth, or riſe up and infect the breath, as in many Diſeaſes, eſpecially when the Excrements putrifie about the Stomach in the Meſeraick Veins, there is ſtinking Breath going before, and accompanying them.

The Stink of the mouth is the Cauſe of a ſtinking breath

The Mouth is not ſtinking onely from things eaten, and putrefaction in the Teeth, but from the Spettle and the like, as in the French Pox, from the evil Humors ſent thither by the anointing with Quick-ſilver. Alſo Filth above the Teeth, cauſeth the ſame. The filth which grows in ulcers of the Mouth and Jawes, cauſeth alſo a ſtinking breath, yet Matter that is Natural will not ſtink, as in the Ulcers of the Lungs, there is little ſtink in reſpect of the matter, till it rot.

The Stink in the noſe, is the Cauſe of the Stink of the Breath.

When Flegm, Filth or the like, is long contained in the fartheſt part of the Noſtrils, about the ſpungy bones and in the cavities of the upper Jaw-bones, they ſend a loathſom ſtinking Scent. And this is called the ſtink of the Noſtrils. And this may come from the ſlimyneſs of the Snot, mixed with divers Humors, and from the ſtraitneſs of the Paſſages, where the filth is gathered, and lodgeth, till it fall or be blown forth, and this ſtraitneſs is either Natural or Accidental, and then the Noſe is flat. The ſame comes from ulcers in the Noſtrils, and there is a ſtink from them according as they are corrupted: as we ſhewed in the Ulcers of the Noſe. They write that the ſame may be from Humors putrified within the Skull, about the Organs of Smelling, or in the Ventricles of the Brain, but this is not probable, for ſuch Putrefaction could not be in the Brain without greater accidents, and ſomtimes death.

The Cure.

The Cure of preternatural Efflation.

The Cure of preternatural Efflation which comes from breath depraved was ſhewed in depraved Breathing.

The Cure Snoring.

Nor can you cure that Snorting which is from the ſtraitneſs of the Noſtrils any way, but as you cure the ſtoppage of Breath by the ſtraitneſs of the Noſtrils: as we ſhewed there, as alſo how you ſhould purge the Noſe from Snot and Flegm. Notwithſtanding, if it come from the fault of the Inſtrument, when the noſe is flat or ſtrait, it can ſcarce be taken away, but it may be mended, if they ſleep not upon their back but ſide. In Horſes this ſnorting is cured by cutting the Noſtrils.

The Cure of belching and farting.

Belching and Farting though they are good and for eaſement, yet becauſe they are unſeemly, they are to be reſtrained, or to be let privately. But if they be ſo forcible, that they cannot be ſtayed without danger, you muſt hinder the increaſe of wind, and this will hinder the noiſe and rumbling of the Guts, by taking away Crudities, and by diſcuſſing of wind with inward and outward Medicines, ſuch as are preſcribed in the Weakneſs of the Stomach; to which they uſually apply things proper for the Spleen, in the Noiſe under the Ribbs, uſual to Virgins. And this is good not becauſe the wind cometh from the Spleen, or is contained there, but becauſe the vertue of the things outwardly applied to the left ſide doth reach the Spleen, and therefore in ſome meaſure ought to be proper for it; as when you mix Seeds, as Cummin and the like in baggs made to diſcuſs wind with Rue, Agnus Caſtus, Ceterach, and the like, and rub the Pouders with Vinegar, or when we add Oyls proper for the Spleen, to the Oyntments we uſe to expel wind.

The Cure of noiſe in the Guts.

The Cure of a ſtinking breath

If ſtinking Breath come from things eaten, as Garlick, or Raddiſhes which cauſeth belching, it will ſhortly be gone, and you may for that time keep a diſtance from Company, or if you muſt needs converſe, uſe ſome Perfumes to correct it. But if it come from unclean teeth, or from between, or in the Hollowneſs of them, or other filth in the Mouth, then you muſt pick the teeth, and cleanſe the mouth, and pull out rotten teeth.

If it come from the Stomach, that muſt be purged and amended, if from Diſeaſes, as the Pox, they muſt be cured, and then it will vaniſh. If from Looſneſs of the Stomach, when the ſtink comes from the Guts to the Mouth, it is almoſt an incurable Diſeaſe in the Organ. But the Stomach muſt be ſtrengthened and aſtringed, and in all theſe Cauſes, ſweet things muſt be held in the Mouth and chewed, and the mouth waſhed with them, and they muſt be gargled and ſwallowed to correct the Stink, as followeth.

If the Cauſe be in the Stomach, purge it with things proper to the ſtink of Excrements, and the moiſtneſs of the Stomach. Among which the Pills of Aloes are beſt, becauſe they cleanſe the Stomach, and reſiſt Putrefaction, or purging Wine, with Wormwood, which doth the ſame with Aloes, and is alſo ſweet. Alſo other Purges, mentioned in Weakneſs of the Stomach. Among which Rhubarb, and Myrobalans are the chief and beſt Purgers; but you muſt mix many ſweet-ſented therewith, to correct the ſtink, as well Plants as Spices, and therefore the Aloephangina-pills made of Spices, taken often are good. And we add to the purging Wine, Angelica, and the like that are well ſcented.

The Alteratives that are given to ſtrengthen the Stomach, muſt hinder the producing of Excrements: and this is by good Diet, which is little and dryed. Let him be temperate in eating of fleſh, becauſe it eaſily putrefies, and let it be well ſpiced, and with Vinegar, ſour Juyces of Sorrel, Citrons, Lemmons, Oranges; as alſo his other Meat. Let his Bread be made with Caraway and Fennel-ſeed. Let him after Meat eat Quinces, Pears, and other Aſtringents. when the Stomach is looſe eſpecially; Alſo let him eat Aniſe-ſeed, Fennel, and Coriander, Comfits, and other Pouders to be uſed after meat. In the morning faſting let him take the Pouders, Lozenges, Electuaries, Confections, and Conſerves, which are good in a moiſt and looſe Stomach, mentioned in the Weakneſs of the ſtomach, chooſing thoſe that are moſt ſweet-ſcented, as Aromaticum Roſatum, Diamoſchum, Diambra, and the like. Tryphera magna is commended to make Men well coloured, and of ſweet Breathes: And they ſay that Maſtick often taken, doth amend this Infirmity.

You muſt hold ſweet things in the mouth, and chew, and ſomtimes ſwallow them, as theſe following.

Of Simples, Angelica-root is moſt ſweet-ſented but bitter; alſo Maſter-wort, Zedoary, Nutmegs and Cloves, are good.

Muſk and Ambergreeſe for rich people, are excellent, with Sugar, made into Lozenges, with the Infuſion of Gum Traganth, made in Roſe or Orange-flower-water, or

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the like, and held in the mouth, to diſſolve and give a good Scent. To theſe they add Wood-Aloes, Sanders, Angelica-roots, which are good for a weak Stomach. Alſo a little Benzoin.

Beſides theſe, many ſweet-ſented things may be chewed, as Orris, and Acorus roots, Cypreſs, Elicampane, Orange peels, Citron peels, Roſes, Bayes, Marjoram, Smallage or Parſley chewed, taketh away the ſtink of Garlick and the like, and conceals that which is from the mouth. Alſo Dill, and Aniſe, and Sowthiſtle, *Dioſcorides* commends Myrrh, and Maſtick. *Mathiolus* commends Gold held in the mouth.

Of Compounds, Wine is good to waſh the Mouth, or to be drunk, in which the Roots and Seeds of Angelica, Marjoram, Sage, Coriander ſeeds, and other ſweet Herbs and Spices were ſteeped.

Vinegar of Roſes, Currance, Raſ-berries, Straw-berries, is very good, mixed with other things for to waſh, or held in the mouth or ſwallowed, doth preſently take away the ſtink of things eaten.

Let him conſtantly waſh his mouth with ſweet red wine, Vinegar, Salt, and Allum.

The Decoction of green Myrtle leaves in Wine, is good to waſh the mouth, and the Decoction of Citrons, and the like.

Another is made of the Decoction of Cypreſs roots, Citron peels, Roſes, Sanders, Cloves, Cinnamon.

There are divers ſweet ſtilled Waters, as of Roſes, Musk, or Cloves, and other Spices, Salt, Orange-flower-water. Alſo Aqua vitæ, with the Infuſion of Cinnamon and Spices.

The diſtilled Oyls of Cinnamon, or other ſweet things, are very good, either mixed or alone, if the leaſt drop be held in the mouth.

If the teeth be foul, rub them with ſweet aſtringent things, and ſuch as reſiſt Putrefaction.

As, Take *Orris roots two drams, Angelica half a dram, Sanders, Wood-Aloes, Savine, or Juniper one dram, with a little Musk, and two drams of Salt Alkali.* Some add Cuttle-bone, Harts horn, burnt Allum, when the teeth are foul, as ſhall be there declared.

℞ Or mix a little Musk with Salt, or Harts horn, &c.

The Cure of the ſtink of the Noſtrils.

If the ſtink of the Noſtrils come from an Ulcer, when that is cured it vaniſheth, of which we ſpake in the Ulcers of the Noſtrils. But if it come from an Organical Diſeaſe of the Inſtrument or Noſe, when it is too ſtrait, it is almoſt incurable, except you prevent the Falling of the Excrements from the Brain to the part.

But if it come from filth which either from its plenty or malignity is eaſily corrupted, being retained and ſtopped, then you muſt go thus to work.

Firſt we purge the Head and Body of the Humors that abound, with Medicines mentioned in the Excrementitious Diſeaſes of the Head.

Then ſnuff up things into the Noſe, or anoint the Noſtrils with Oyntments which cleanſe and provoke Nature to expel the filth, and leave a ſweet Scent in the Noſe. For which uſe we have mentioned divers Errhines or Purgers of the Head by the Noſe, the Phlegmatick Diſeaſes of the Brain, with which you may mix theſe ſweet-ſcented things following.

The Juyce of Flower-de-luce anointed or ſnuffed up, is ſweet and very good.

Or thus. Take *the Juyce of Flower-de-luce one ounce and an half, of Marjoram one ounce, of rich Spaniſh Wine half an ounce:* mix them, and add Juyce of Beets to force more.

Or when there is great putrefaction, add to that the *Juyce of Centaury and Wormwood, each one ounce; Vinegar of Roſes, or Squills half an ounce, Myrrh one dram.*

The Juyce of Bayes, and Myrtles, and other ſweet plants may be added.

Somtimes theſe are boyled thick, that they may ſtick the better. Thus,

Take *of the aforeſaid Compoſition one ounce and an half,* ad *Labdanum, Storax, each half a dram; with Honey, or the infuſion of Gum Tragamh made in ſweet Water:* make a Liniment.

We uſe ſuch things to be ſnuffed, or poured into the Noſe to cauſe a ſweet Scent, as Spaniſh Wine in which Baſil, Marjoram, Calamints, Bayes, Lavender-flowers, Cinnamon, and Cloves have been infuſed.

Or the ſtilled Waters of Orange flowers, Roſes, or Lemmons, or of thoſe Plants which were ſteeped in wine.

Or other waters of Plants ſeeds, and Spices, that ſmell ſweet, which with Musk or Ambergreeſe will be more pleaſant.

Alſo there are ſweet Oyntments of Musk and Ambergreeſe diſſolved in Oyl of Been or the like, which take not away the Scent of the other Compoſitions if they be added. Civet is to be uſed alone.

The ſtilled Oyls of Cinnamon, Cloves, Marjoram, and the like, mixed with white Wax, and put into the Noſtrils do ſmell ſtrongly, and laſt long.

The Cure of breath from a Wound.

If a wound be in the rough Artery, which ſendeth forth Air, Breath or Scent, it is deadly for the moſt part, becauſe that part cannot eaſily be cured. But if the wound be in the breaſt and the internal part hurt, it is the like for the moſt part, although as I ſhewed in the Diſeaſes of the Lungs, I ſaw one eſcaped that had a wound in his Lungs. The other wounds of the Breaſt without hurt of the internal parts muſt be cured as ordinary wounds.

When wind comes from a wound, that ſhews the Stomach and Bowels to be hurt, and it is incurable. I know other wounds in the Guts that have been cured.

CHAP. IIII.

Of the Voiding of Seed.

The Kinds,

A Spermatick Excretion or Voiding of Seed in men, is the Effuſion of it by the Yard, in Women it uſeth to be Naturally into the cavity of the womb; and it is preternatural, when it is too much or floweth ſooner then it ought, and the more when it is foul, or paſſeth by an improper way.

Too great Effuſion of Seed weakneth very much, and makes the Body faint, and unfit for its Offices, and diſcoloureth it, and haſtneth Age and Death; and it comes either by Venery or without.

Too much Venery.

When there is too great Effuſion of Seed by Venereal Acts, Men through Intemperancy and Luxury deſtroy themſelves, and Women that before were ſtrong, grow weak, and men by that means are unfit for Procreation, and women for Conception: ſo that as it may be obſerved in men only, they ſend forth in Copulation only a drop or too: or it is not concocted but crude and bloody, and rather Blood then Seed.

The Voiding of imperfect and crude Seed.

If Seed fall out without a Venereal Act againſt the will it is called a *Gonorrhœa* or Running of the Reins; and if it be with pleaſure, becauſe it often comes in the ſleep and Dreams, it is called a Nocturnal Pollution. And if it be often, becauſe it weakneth as a Venereal Act, it is preternatural: and it doth more weaken, if it be without pleaſure night and day, and crude and watery for Continuance.

A venemous Gonorrhœa or Running of the Reins.

Somtimes there is an involuntary Effuſion of venemous Seed without ſenſe of delight, which is not like Natural Seed, but is like a cer-

rain

tain white and yellow Venom, after which follows matter at the Yard, and heat of Urin: as we shall shew, and this is called a virulent Gonorrhæa, which is commonly a symptom of the French Pox, as we shewed, sometimes it is without it, in some especially unclean Strumpets with which she infecteth them that trade with her, with the Pox or a Disease like it.

The Voiding of Seed in a convulsion.

Hitherto you may refer the involuntary Effusion of Seed in the Falling-sickness and Convulsion, and although it do no hurt, yet it is preternatural.

The voiding of Seed at another Passage.

We shewed, that Seed might flow preternaturally by another Passage, namely by some Original Passage, or Fistula under the Yard of a Man, either from a defect in Conception, or which may cause the same Defect.

The too quick Effusion of Seed.

It is also preternatural, if the married people do not at the same time spend their seed, especially when it is at the beginning of Copulation, or before by the way, because this causeth a defect in the Venereal Act, so that it either is not, or diminished and imperfect.

Hither may also be referred that Effusion of Seed, when only a little froth is voided with vehement desire, without sense of satisfaction in pleasure, by which though they are not weakned, yet it hinders the perfection of the Art. Some say that matter flowing from the Brain may be sent forth of the Yard, but it seems improbable, because there is no plain passage into this common way for the Seed and Urin.

The Causes.

The Cause of the mentioned preternatural Fluxes of Seed, is either from Irritation, or provoking or Weakness, or Anastomosis, or from a Disease by Consent.

The Irritation or provoking of the Seed-vessels, is the Cause of too much Venery and of a Gonorrhæa.

Too much or too quick Effusion of seed, or involuntary in both Sexes, comes from the Irritation of the seed-vessels, which pricks the expulsive Faculty. If the vessels swell from plenty of seed, because it passeth with delight, causing many to be too much given to Venery; it is the cause of too great Effusion, and of the weakness that followeth, except it be from Heat of Lechery, to shew themselves powerful at Venereal Game, or for gain sake, as Harlots do. And the same is done by Irritation, if there be more heat or sharpness then is fit: as we shewed in the Causes of Lechery.

Also the same Seed by pricking, (through the Imagination only of the Act, which is usual in dreams, and the like thoughts) being moved and sent forth, causeth Pollutions sleeping and waking.

Also this comes from the heat of Seed, so that it is sooner ejected in the Action then it ought; or some part comes forth before the Act.

And also that it comes forth with Heat and Burning.

But if there be great sharpness in the Seed from Infection or Corruption, then follows the virulent Gonorrhæa, or venemous Running of the Reins, comming commonly from the French Pox. And this may come before they have the Pox from some other Venom which was gotten by Infection of other seed in Copulation, and so turned corrupt and sharp, by which means, not only this foul and involuntary Excretion comes by the sharpness, but also in continuance of time an ulcer and pissing of matter.

The weakness of the Seed-vessels is the Cause of a Gonorrhæa.

The involuntary Flux of Seed in the Gonorrhæa, comes from the weakness of the Spermatick Vessels: when the seed is watery, and not concocted to the likeness of milk; for then being thin it easily comes from its place without sense or with very little, and without any Cause, or with the least pricking not only in the Yard, but Fundament, when the stools are very hard, or as *Fernelius* speaks of one, when a Clyster is given. And this weakness comes from distemper, especially cold, or want of Natural Heat in the Parts, or the whol Body which makes the Seed so watery. For it is not likely that the Waterishness of the Seed should come from Flegm, because it is made of blood, which though it be crude and watery, yet the stones and breasts do alwayes take the purest blood to make seed and milk, in foul Bodies full of Excrements, as appears by men of evil Habit of Body getting Children, and women that nourish their Children, by giving suck when their Blood is impure.

Also Weakness comming from the loosness of the seed-vessels, produceth somtimes a Gonorrhæa, when the places containing the seed in their windings, and the Vessels that carry it, are too large and loose, so that it may easily fall out. This loosness comes from often Venery in a short time, sometimes sooner, somtimes later to luxurious People, by which the baggs of seed being often emptied and filled and from the loss of spirits, are so loose and weak that the seed is thin and watery.

The Anastomosis or opening of the mouths of the Seed-vessels, is the Cause of imperfect and bloody Seed.

By the opening the mouths of the Seed-vessels which make it of Blood, there comes bloody seed or blood instead thereof in Copulation, when by the often Action, in a short time, the Vessels that contain the seed are so empty, that they draw blood or imperfect seed from the mouths of the seed-vessels opened by this sucking. And this sucking comes from the Lechery, or Heat of the Womb (as is said of African Women) as it happned to a Soldier a while since, that lying forcibly with a Countrey-wench, was so brought down, that after often Lechery he voided bloody seed, and by that means fell into a Consumption that caused his death.

The soaking of the Seed-vessels in a Convulsion, is the Cause of loss of Seed.

There is also an involuntary Effusion of Seed from a Disease in other parts, when the Seed-vessels suffer by consent, as the Nerves in a Convulsion, in which through the forcible shaking which moveth the whol Body, the Spermatick vessels being shaken, do cast out seed somtimes, especially when it abounds, even as by the same violence, through the pressing of the Muscles, of the Belly, the Bladder being pressed, sends forth the Urin. And this is rather the Cause of loss of seed in Convulsions, then the Convulsion of the Muscles of the Seed, although they also suffer. For though in the Act of Venery, they help the Effusion by gentle opening the Vessels, yet they do it not before the seed be out of its bag, and is carried by them, wherefore in Convulsions they do not help the Effusion, but the disorderly motion drives it from its place. Neither doth the Loosning of these Muscles in an Apoplexy cause the flux of seed as it doth of Urin, because these Muscles are made for Retention, and not as the Sphincter.

The Cure.

The Cure of the Gonorrhæa.

If the involuntary flux of seed in both sexes, be by Nocturnal Pollution from plenty of seed, it is not regarded, because it never comes but when it aboundeth, and hurts not much, and is cured either by Marriage, or if not, by abstaining from things that increase it, and provoke it forth. But if the Gonorrhæa come from hot and sharp seed, that must be tempered. And if from weakness of the Vessels it be made too watery, it flow too easily, or cannot be contained by reason of the loosness of the Vessels by too much Venery, because it weakneth the Vessels must be strengthned, and the seed thickned; all which may be done by the follow-

following Remedies applied to the Cauſes of the Gonorrhæa.

Somtimes we purge, if the ſeed grow to ſharpe and watery from colerick and watery Blood, to cleanſe it, ſo that it may afford good matter to make ſeed. And with ſuch things as are fit for the Humor abounding, theſe are ſo ordinary, they need not be mentioned here.

Things that alter are given to ſtay this Flux according to the diverſity of the Cauſe. And if it be from plenty of ſeed, we diminiſh it with Dryers, and that by a proper quality deſtroy it or conſume it; if from heat and ſharpneſs, we allay them with cool and gentle Remedies. If it be too thin and watery, we thicken it; if the Veſſels that contain it are weak or looſe, we ſtrengthen them with aſtringent, hot and proper things. All which are partly done with the Remedies mentioned in Sælacity or Laſciviouſneſs, eſpecially if the Gonorrhæa come from plenty or heat of ſeed, which cauſeth Lechery, and partly with theſe following, which are fit for the Gonorrhæa that comes from any Cauſe.

A drying Pouder that bindeth and worketh by Propriety. Take *Roots of Orris, Agnus Caſtus ſeeds and Coriander prepared, each one ounce; Seeds of Plantane, Roſes, Rue, Winter-cherries, Mints, each half a dram; Amber and red Coral, each one dram; Frankincenſe, Maſtick half a dram*: make a fine Pouder, give *one dram by it ſelf, or with Sugar of Roſes, or ſome convenient Liquor.*

When you will dry and aſtringe more, you may ad theſe following to the former, as Myrtle ſeeds, Bay-berries, Sumach, Yarrow, Agnus Caſtus, Rue, Roſes, and Ceterach, Acorns, Pomegranate flowers, the Pouder of the Guts and Gizards of Hens, Bulls, or Dears pizles, Hair of an Hare burnt, Ivory, Bole, Blood-ſtone, Cryſtal.

For to allay the heat and ſharpneſs of the ſeed. Take *the four great cold Seeds two drams, the four leſt cold Seeds, eſpecially of Purſlain, Lettice or Sorrel, each one dram; of Water-lilly roots or flowers and Roſes, each one dram and an half; of Gum Abarick or Traganth parched, one dram*: make a Pouder, to which you may add the third or fourth part of the Pouder aforeſaid. Some add Camphire to cool, or becauſe it quencheth the ſeed by a ſecret Quality.

A Decoction extinguiſhing the heat and ſharpneſs, and ſtaying the Flux.

Take *of Orris and Water-lilly roots, each one ounce; the Leaves green or dry of Agnus Caſtus, Coriander, Ceterach, Yarrow, Sumach, Plantane and Lettice, each one handful; Mints, and Rue, each half a handful, Roſes and Water-lillies, each one pugil, of the four great cold Seeds half an ounce, of the four leſs two drams, Plantane and Purſlain ſeed, each one dram; Myrtles two drams, Winter cherries half a dram*: boyl them *in Water and red wine, and in three pints of the ſtrained Liquor, diſſolve two ounces of Syrup of Quinces, and with Sugar boyl it to halfes.* Let him drink it often.

The Syrups of Purſlain, Plantane, and others made of the Juyces and Decoctions, of the aforeſaid Plants, or of ſharp things, as Citrons, Pomegranates or Myrtles, is alſo good.

Alſo the Juyces of thoſe Plants, and the diſtilled Waters of the ſame.

Alſo Conſerves and Candies alone, or with the Pouders or Syrups aforeſaid.

Sheeps Milk or ſtilled Milk often drunk, temper the ſharpneſs of the ſeed. Alſo an Emulſion of the cold ſeeds, of Almonds, and of white Poppy ſeeds, and others mentioned in heat of Urin.

We ſomtimes uſe Clyſters in this cauſe, as Topicks to the part, becauſe their ſtrength will reach from the Guts to the ſeed-veſſels, they are made according to the Cauſe, of a cooling Decoction, if heat be the cauſe, with dryers and aſtringents, mentioned in the Decoction, and others, as Oak leaves, Cypreſs, Pomegranate flowers, and the like, boyl them in Water, red Wine, or a little Vinegar.

Some uſe drying Injections of Tutty, and the like into the Yard.

Alſo Baths, Fomentations, Oyntments which repreſs Lechery, may be here uſed. Alſo a Fomentation of the Codds, made of the Roots of Dogs-tongue; or of a Decoction of the Herbs mentioned for Decoctions and Pouders.

For ſtrengthning of the Veſſels that contain and carry the Seed, when they are weakned or looſned, when the Gonorrhæa is old, or ſubject thereto. The Natural hot Baths that bind, are good for ſome time continued. Or other artificial Baths, of the vertue, to which you may add hot things to cheriſh the Native Heat, as Roſemary, Marjoram, Lavender, and the like.

Alſo if Heat be the Cauſe, you may uſe Oyntments to cool, dry and aſtringe, ſuch as work by propriety to the Reins or Codds.

Among which this is excellent. Take *Oyl of Myrtles, Maſtick, Quinces, each three ounces; Oyl of Orris two ounces, Juyce of Plantane, Purſlain, Lettice, Mints and Vinegar, each one ounce and an half*; boyl them till the Juyce be conſumed, add *Cypreſs roots, or Galls, Orris roots, Agnus Caſtus-ſeeds, each one dram; Juyce of Sloes two drams, Spikenard one ſcruple, with Wax*, make an Oyntment.

The Oyl of Camphire is commended to the Codds, and Seam or Seate.

A thin leaden Plate applied at night to the Back, as it will reſtrain Lechery, ſo will it cure the Gonorrhæa.

A Pillow ſtuffed with Wool, with Agnus Caſtus, and Rue, laid under the back is alſo good.

Opening of a Vein is good if it come from plenty of ſeed, eſpecially where there is Plethory, to take away the cauſe of ſeed.

Let them be dieted as in ſalacity or Lechery mentioned: and uſe much Vinegar, for it wonderfully allayes the heat and ſharpneſs of meat and ſeed. And if the ſeed be too thin; let them eat groſs meats, as Lentils, parched Beans, with Vinegar; alſo Pine-nuts, Almonds, Rice; alſo Turtle and Parſnips.

The Cure of a virulent or venemous Gonorrhæa or Running of the Reins.

A virulent Gonorrhæa is not to be cured, and ſtopped as another, becauſe it comes from corrupt ſeed, which will hurt if retained, by ulcerating the parts, but you muſt provide that better may follow that which Nature ſends forth. And this is compleatly done by curing the Fench Pox, if it be joyned therewith. But if it come after the Pox, which leaves an Ulcer in the Yard which ſends forth this matter, then you muſt cure it as a mattery Excretion, as was ſhewed there.

Alſo if this malignant Gonorrhæa come from another impure Copulation, becauſe it turns to matter, it muſt be cured as this.

The Cure of Seed flowing forth in Convulſions.

Other involuntary Excretions of ſeed in Epilepſies and Convulſions, becauſe they do no hurt, and neither the Patient, nor they about him obſerve it is not regarded.

The Cure of too much Venery.

Too much Venery which cauſeth Faintneſs, requires no other Cure but abſtinence from immoderate uſe thereof. And for that end I have in Salacity mentioned Medicines to quench the Heat. And let the Body after be reſtored by nouriſhing and refreſhing Diet: as we ſhewed in the involuntary Excretion of Seed.

The Cure of too quick Effuſion of Seed.

When ſeed is ſpent ſooner then it ought, in the beginning or preparation to Venery, by which means the act is imperfect and unprofitable for Conception, becauſe it is too hot and moiſt; you muſt take thoſe things mentioned in the Gonorrhæa from Heat and Moiſture, and this will be cured with more eaſe then that, which is involuntary, if it be corrected, and the Diet continued.

CHAP. V.

Of Voiding of Blood

The Kinds,

THat Excretion of Blood which is according to Nature in Womens Courſes, and at the Noſe, or Hæmorrhoids turneth preternatural, if it flow by places not ordained for the ſame; or if the blood offend in quantity or quality: as we ſhall ſhew. But if blood be ſpet out, vomited, piſſed, or void by ſtool, with other Humors mixed, the Cure ſhall be mentioned in thoſe Excretions.

Bleeding of the Eyes. If blood come forth at the Eyes though little, which is very ſeldom, it is preternatural.

Bleeding at the Ears. Or if the Ears ſend forth blood or matter with blood. I ſaw one that uſed to bleed at the Noſe, who had a great beating pain of his Head with redneſs of Face, and bled both at Noſe and Ears very plentifully.

Bleeding at the Noſe. The Noſe often bleeds, and it is called the *Hæmorrhagia*. And becauſe it is uſual and Natural with ſome; it is not counted preternatural, till it is immoderate, and the Patient faint or die, as it hapneth to ſome both ſound and ſick. And in ſome Diſeaſe of the Noſe, blood flows forth with ſnot.

Bleeding at the Yard. Pure Blood ſeldom flows from a Mans Yard without Piſſing, and then it is preternatural, and painful. Somtimes Blood inſtead of Seed is voided in Copulation: which as I ſhewed, is rather imperfect ſeed.

Voiding of blood by the paſſages of urin. In Women there is a preternatural Flux of blood from the paſſage of the urin, without piſſing with great pain, when the ſtone is taken out of the Bladder.

The immoderate Flux of the Terms. The Natural Flux of the Terms is preternatural, if it be not at the night time, or be longer, or in great quantity; or after they have been long ſtopped; or when women have been thought with Child, by reaſon of the greatneſs of their bellies, through that ſtoppage, and then have them ſuddenly, and in great quantity with great weakneſs and hazard of life. But

In old Women there is a Flux of blood from the womb different from the Terms. that Flux is preternatural and different from the Flux of the Terms, if when the Terms are paſt, and the Woman is old, it come without order, ſometimes more, ſomtimes leſs, remaining long, which we call not the Courſes, but an Hæmorhagy of the womb.

Faintneſs, Palneſs and evil Habit followeth theſe preternatural Purgations of blood from the womb, either pure or mixed. And after a long ſtoppage, if there come ſuddenlya great Flux, it weakneth and ſomtimes kills. I obſerved in three Women which were paſt their Courſes, this Hæmorrhagy or Bleeding of the womb, in one it laſted above two years, in the other a long time, and in one of them with ſuch great pain of the womb, almoſt continuing a whol year, not yeelding to any Medicines, it continued till death.

Bleeding after Child-birth. Somtimes the Flux after Child-birth is ſo great that the woman is much weakned thereby. And this is not only after a Natural birth, but after Abortion with great Danger.

Bleeding in the time of deflowring and Copulation. There is another Flux of Blood from the womb at the firſt Copulation of the woman, when ſhe looſeth her Virginity, ſuch as when ſhe hath her Terms, and this becauſe it is counted the ſign of Virginity, and therefore ought to follow, is not counted preternatural or hurtful.

Alſo this bleeding in Copulation, is afterward and with great pain.

The immoderate Flux of the Hæmorrhoids. There is another Flux at the Fundament, beſides that of a Dyſentery, Needing, or Liver-flux, which is common in both ſexes, called *Hæmorroids*, as any other flux of blood may be called. Which albeit it is uſual and profitable to ſome Tempers and Conſtitutions, eſpecially of Men, and ſomtimes of Women, when old eſpecially, comming not in order like the Courſes, but once, twice, or thrice in a year: yet is it preternatural, when it is immoderate, and flows too long, or returns too often, and cauſeth Faintneſs, Weakneſs, Paleneſs, evil Habit and Dropſie, as we ſhewed in other Fluxes of blood.

In this Flux, the Blood is ſeparated from the other Excrements being almoſt pure, and not ſo black as blood that flows from other parts. And if it be diſcoloured or impure, it will be rather very red or yellow, then otherwiſe.

When this Flux comes in a Diſeaſe, and doth not good, as when it comes in order, curing the Diſeaſe, but hurt by its violence, making the Body weak, it is preternatural.

Alſo that which comes not Naturally, but by a violent Cauſe, as ſhall be ſhewed, and therefore is unprofitable, eſpecially when painful, and hurt followeth, is preternatural

Another bleeding at the Fundament different from the Hæmorrhoids. Beſides this Flux of the Hæmorrhoids, there are other preternatural from the Fundament. As that which is of little blood appearing, comming from a violent Cauſe, with Itching and Pain.

Hither may be referred that bleeding in women, when the Terms come not only from the womb, but Fundament. This is ſeldom, but ſomtimes it hath ulcerated the Parts.

The drops of blood from the Pores of the Skin. It can ſcarce be without a Miracle as in our Savior, that Blood ſhould ſweat through the Pores of the skin. But we ſaw once in a Child that had a Dropſie moſt of his Pores bloody, as if his Body had been ſprinkled with blood, and yet the blood did not flow or foul the Linnen.

Bleeding by wounds or Orifices. Blood uſually flows from the body, not naturally by its orifices and wounds great or ſmall, either made for bleeding by Art or by Chance: as we ſhall ſhew here, and as was declared in Wounds, and the like Diviſions of the Skin and Diſeaſes.

Blood flows but little from the skin, when that is only divided without other hurt.

When a Vein is opened, it leaps out abundantly, and this will weaken the ſtrength, if immoderate: As alſo when there is no need, and when it is done raſhly, and from an evil Cuſtom, by which means many have grown weak and old before their time.

In the opening of an Artery, the Blood being hot, leaps by ſtarts, and if it continue, it brings weakneſs and worſe accidents. As it hapned in the opening of an Aneuriſm, there was a total loſs of blood and ſtrength which cauſeth Death.

We have ſeen in the Feet a Vein open of it ſelf, as in Phlebotomy, and it hath flowed in great quantity into the Shoes before Notice hath been taken thereof. And we have ſeen the ſame in the crooked Veins of the Thighs. And ſome ſay that it hath been ſo in the Face, Arms, Breaſt and under the Ribbs; from whence, if it ſhould come at night, and not be diſcovered, it would be as dangerous, as bleeding over much from opening of a Vein by Art. This is rare in Men, but uſual in Horſes, when they are very hot, but it doth no harm.

When I was at School, I ſaw my School-fellow that ſat

next

next me, bleed at the ſmall Vein, in the tip of his Noſe very much and often, and it opened of it ſelf, and this came from the heat of his Body by violent Exerciſe.

Somtimes the Blood flows more or leſs from the Habit of the Body in Wounds and Amputations, and it is ſo great ſomtimes, that it cauſeth great weakneſs, except it be ſtopped.

Somtimes Blood flows from the internal Cavities of the Belly, Breaſt, Head &c. In wounds there, or falls into the Cavities. And if this be immoderate, it weakneth, and if it be contained in the Cavities, it grows together and putrifies, and brings greater Symptoms then thoſe that come from a Wound.

The Cauſes.

The Cauſes of all theſe Kinds of Bleeding from divers Parts of the Body, Is either from the Solution of Continuity, by opening of the Mouths of the Veins, or the ſolution of Continuity from the Hurt done to ſome Veins or parts underneath.

The opening of the mouths of the Veins or Anaſtomoſis in the Ears, noſe, neck of the womb, ſtrait gut or skin is the Cauſe of bleeding in thoſe Parts.

Some comes from the opening of the Mouths of the veins according to their diverſity.

The inward Veins of the Ears opened by Anaſtomoſis, ſomtimes bleed much; and this comes from the plenty or the thinneſs of the blood in the head but ſeldom, for then Nature would rather ſend it forth by the Veins of the Noſe, except it flow both wayes: as we ſhewed.

The inward Veins of the Noſe that come from the jugular Vein, that aſcendeth by the Jawes to the Brain, being opened by Anaſtomoſis, cauſe an Hæmorrhagy. The Cauſe of this Anaſtomoſis is the plenty of blood, which Nature deſires to diſcharge, by theſe tender Veins in that place of the Noſe, which are more eaſily opened, in Men who have no eaſier Paſſage for it. For that Evacuation which they have by the Hæmorrhoids, which is ſeldom, and but in ſome, is onely of that blood which is in the branches of the Gate-vein. But in Women, if they be ſo full of blood, that it cannot be ſufficiently diſcharged by the menſtrual Veins of the womb, or when the Terms are ſtopped, Nature doth often ſend it forth by the Noſe. And this Hæmorrhagy though it be not uſual, yet it is Natural, except it be immoderate. Alſo when Blood is too hot, it opens the Veins of the Noſe, either when it is ſo hot by Nature, or by Motion, Sunning or Baths. Or if it be inflamed in hot Diſeaſes of the Head or Feavers, it breaks forth at the firſt, or in the heighth of the Diſeaſe by Criſis or judicially. Alſo thin blood and more watery, and mixed with Choller, which ſooner pierceth the Mouths of the Veſſels, cauſeth bleeding at the Noſe. Hence in evil Habit, Dropſies, and Jaundies, although blood abound not, this bleeding may be. But if more Cauſes agree, the Flux will be the greater. And this is oftner and greater, if the Veins be looſe by Nature or often purging. Alſo it flows and is increaſed by force, as violent and often blowing of the Noſe, which opens the Veins by force of the blood thither.

If the Veins in the Neck of the Womb, that come from the hollow Vein, be opened by Anaſtomoſis, there is great Effuſion of blood. For as when theſe open at their ſet time, they cauſe the Natural Flux of the Terms, ſo when they open at other times, they cauſe a preternatural Flux which is immoderate, or the like which is unſeaſonable, but like to the Courſes which we mentioned before. When the Mouths of the Veins are open by plenty of blood ſent thither, in a Plethory, and they bleed ſooner and oftner, which is unſeaſonable, or when they bleed at the appointed time, but immoderately: Or when the blood there, by its Heat and Thinneſs, opens the Mouths of the Veſſels, and cauſeth an immoderate Flux: Or when Nature diſcharging her ſelf by this way of Superfluities, with the Blood at the time of the Courſes, or otherwiſe cauſeth this unuſual and large Flux: In which the Blood is ſometimes watery, and ſomtimes impure. But this Flux is greateſt, when much blood either pure or impure, is in the Veins of the Womb, from the long ſtoppage of the terms, and ſuddenly breaks forth, and ſo enlargeth the Mouths of the Veins by its violence, that blood is not only out of the womb, but other great Veſſels which ſupply, and the Body left as it were without blood.

And as this is in the Veins of the Neck of the Womb, ſo it is in thoſe of the bottom thereof, in Women that have had their Courſes long ſtopped, which ſwells their bellies: as we ſhewed in Tumors, and when they open ſuddenly they cauſe a dangerous Flux.

Somtimes there is a Flux of Blood from violence, when the Mouths of the Veins of the Neck of the Womb are only opened without Solution of Continuity. And this is often at the firſt Copulation, not by reaſon of the skin called *Hymen*, being broken (as they ſuppoſe) becauſe a Membrane hath no blood, and if it came from thence, it ſhould be torn away. But which is more probable, it is from that ſudden and ſtrong enlarging and dilating of the Orifice of the womb, or from the Rubbing of the Neck of the Womb, which it hath not felt before, that the menſtrual Veins are a little opened, and ſend forth blood like the Courſes, or at leaſt ſome Sprinklings.

Alſo there may be a Flux of Blood at the womb, from Medicines that open the Veins thereof, eſpecially if they be ſtrong, or things put into the womb, as Peſſaries, &c.

And, there may be an immoderate Flux after Childbirth, from the Cauſes that the Terms over-flow: and as it is Natural, to have the Veſſels open and bleed, ſo it is preternatural when the quantity is too great, or the blood too thin.

As the Hæmorroids come Naturally from the opening of thoſe Veins which come from the branches of the Gate-vein, yet they flow not ſo as the Terms, (by which it is neceſſary that that blood in women that are fit to conceive, which is laid up for the nouriſhing of a Child, ſhould be avoided every month till they do conceive) but onely then, when the blood in the Meſeraicks aboundeth, or is hot and chollerick (as we ſhewed in the Cauſes of intermitting Feavers that Choler is chiefly increaſed) and aboundeth there, not carried into the hollow Vein, or purged by the Gall, and therefore is ſent forth by the Fundament which is near, and which is ordained for other Evacuations alſo. So when theſe Veins are too open, or too long cloſed, Nature, being provoked by the plenty of blood, or the Heat thereof, or by Choler, which may cauſe great Diſeaſes, endeavors to make an immoderate Flux, and the rather, when the Veins are ſo open, that they cannot cloſe themſelves. From which Cauſe I ſhewed you that two very Learned Men who lived a ſedentary Life, and procured the Hæmorroids by Art, were brought to ſuch a violent Flux, which could not be ſtopped, but cauſed their Death.

But if Nature being moved, neither by Repletion or Impurity of blood, but by other Cauſes, doth ſend forth good Blood from the Meſeraicks without Neceſſity; this Flux will be preternatural, neither uſual nor profitable.

By the opening of the Veins of the skin, blood cannot flow through it or the Pores, nor by the Rarefaction or Diapedeſis of the skin, can blood ſtrain through the like Sweat, becauſe it is thither, and the Pores very little, except the skin be divided, but if it be under the skin with the Sweat there it ſtayes, and cauſeth the Hypochyma or Suffuſion of Blood, which I ſpake of. And although as I ſhewed in the Boy with the Dropſie, it was ſprinkled about the body, yet it paſt not through the skin, but ſtuck in the Pores, and this is very rare.

There

The dividing of the veins In the Eyes, ears, Yard, Womb, Fundament, Skin, is the cause of Bleeding.

There are many Fluxes of blood that come from the Solution of Continuity in divers parts, which differ in that Respect.

If the Tunicles of the Eye be rubbed when they itch, or divided, the Veins may be hurt, and they may bleed though but a little.

Also they may bleed from the hurting of the horny Tunicle; For I observed in a Boy that had a piece of sharp Glass in the Pupilla of his Eye which I drew forth, that the blood was discussed without any hurt.

If the inward Veins of the Ears be hurt by things thrust into them, a little blood may come forth; or more from a Fall or Stroak, when the Veins are broken.

If the inward Veins of the Nose be hurt, they bleed. This is done by the Nails when they are pricked sometimes, or with other things, by which Men willingly cause Bleeding; as when they provoke Sneesing it may happen. The same comes from a blow or stroak upon the Nose, or a sharp Humor in the Nostrils. In the Gravedo, that is, when a raw Humor falls into the Nose, the blood wil flow, especially when it is much blown. As also from the rubbing off of a Scab therein.

If the Catheter or Instrument thrust into the Yard, do hurt the same, there is a flux of blood alone, or with pis. And this may come also from a stone that passeth through the same.

Also the Veins of the Neck of the Womb being hurt cause bleeding: as in hard travail, after the drawing away of the Secondine, which teareth the Vessels. Or by the Child, which passing through a narrow place teares the same. Or from the Abortion, when the Vessels of the Child growing to those of the womb, will not so well be separated, as when the Child is ripe, but are violently broken.

Or there is a Flux from violent Copulation at the first or afterwards.

There often follows a Flux of Blood, from the using of a widening Instrument to the Neck of the Bladder, when they take out the Stone.

Also from the hurt of the strait Gut; the Veins thereof are of two sorts, if the internal Veins be hurt, which come from the Meseraicks; there is a Flux of Hæmorrhoids, but it doth no good: But if the inward Veins of the Fundament that come from the hollow Vein, there is but a small Flux.

This comes often from things voided, as hard Excrements, or from sharp things eaten, or sharp Suppositories, or from difficult Travail, which hurts the Fundament by straining.

Or from a hollow Ulcer, going from the Neck of the Womb to the strait Gut, the Terms may pass through the Fundament. For without a wound it cannot be so, because Nature cannot make her way, where there is no Continuity of Veins, with the Menstrual which come from the hollow Vein and the Hæmorrhoidal which come from the Gate-vein.

The Cause of all Bleeding in the outward Parts, is Solution of Continuity from internal or external Causes: and they are divers in respect of the Parts.

If the skin be flea'd off by scratching, when it itcheth or the like, there may be a little bleeding.

There will no great Flux come from a wound, only in the skin, when you cut it for the crooked Veins curing, or for Tumors, it bleeds but little, till the Veins be opened.

Opening of a Vein causeth Bleeding.

If any great Vein be opened under the skin, there is bleeding, especially if it be cut, as in Phlebotomy, which so much used to prevent and cure Diseases, in which there will be a great Flux, except it be stopped: Or when any great Vein, as the Jugular is cut. And sometimes when the crooked Veins are cut. And it hapneth that when the skin is cut for other Causes, for Ruptures, or preternatural Tumors that the Veins are cut and bleed; or by a Wound by chance.

When the mouth of a vein opens of it self, it causeth a Flux.

Sometimes the Veins open of themselves, and bleed as if they were cut. This is caused by Plethory, or Fulness, or by Heat, which may open the mouths of the Veins, but seldom break them, except the Vein be very much stretched, as in the crooked veins. Or when Nature hath been used to be often discharged at one part, and seeks to get out by the same, which is the easier done, when the skin is thin, and the veins larger from the often opening.

The cutting of an Artery, the cause of bleeding.

When an Artery is opened by Art or otherwise there is a great loss of Arterial Blood. Also there may be a strong and long Flux of Blood from an Artery pricked or torn under the Teeth: If the Gums be onely hurt, the bleeding is little. And if you open an Aneurism that is let out the Blood that came from the Cutting of an Artery to lodg under the skin, there follows a dangerous Flux of Blood.

A wound in the Parts is a Cause of Bleeding.

If many Parts be wounded, the bleedings are divers. Some wounds are made to cure Diseases, as Imposthumes, Tumors, the Stone in the Bladder, Ruptures: Others are by accident. In which if one or more of the great Veins or an Artery be cut, the bleeding is greater. And because Nature hath placed those great Veins, that they may be safer under the Muscle of the Arms and Thighs, the bleeding is greater. And as in great Vessels, so if the small Veins only are hurt, or if the fleshy Parts be only wounded, the Flux is less. And in great wounds of great veins, if the blood fall into the internal Cavities, as of the Belly or Breast, there will be no great flux at the wound. When such wounds are made by art, not only the blood but matter, which you desire may be let out therewith.

The greatest Fluxes are from the Cutting off of Members, which must be done when they are uncurable or putrified; or when an Arm or Leg is cut off first, and then the bone sawed asunder; or when the finger is cut about the flesh, and then the bone nipped off with a pair of Forceps; or when any Parts that stick out and want bones, are cut off as the Nose, Ears, Lips: or wounded by chance.

The Cure.

When Bleeding comes from the Anastomosis or opening of the Mouths of the Vessels because it is great, that is first to be treated of, because we did not explain the Cure thereof in other Diseases.

The Cure of bleeding at the Ears.

When the Ears bleed from Anastomosis, because it is seldom and from great plenty, it requires no particular Cure, if it be joyned with the bleeding at the Nose, you must first look to that.

The Cure of bleeding at the Nose.

If Bleeding at the Nose do good, as when it takes away fulness, or foulness, and stayes a Disease, it must not be hindered, unless it be so often that the strength fail. Otherwise when it doth hurt comming from Heat, Thinness, Force, or the like, if it be immoderate, it must sooner be stopt: if it be little, or without Snot, it is to be regarded. And if it comes from an Ulcer, that is first to be cured.

The best Method to cure it, is to take away the Cause, when it comes often, especially at the time that it flows not, if it come from Plethory, by diminishing the blood, and if it be hot or thin to temper it. But when the blood flows, you must endeavor to draw it from the Nose, and to stop the Passages, and drive it back: which is done by these following.

You

You must open a Vein in the Arm, on that side that the Nose bleeds, that that blood may follow from the Head into the place of that which is let out, and so be drawn from the Nostril; you must not take much at a time, but stop the Vein, and then bleed a little more, and so by often stopping and bleeding, the blood will be turned, and the Patient not be weakned.

Scarification is like Blood-letting to attract, but is not so violent, because it draws only at the small Veins in the skin: This is best in the Shoulders and sides of the Neck. Some commend it in parts more remote, as in the Wrists.

Also you may draw blood from the Nose by Horseleeches behind the Ears.

Cupping-glasses with a great flame, do derive the blood if often applied, behind the Ears and Shoulders: they are best to the Breasts in Women. And if the right Nostril bleeds, apply a great Cupping-glass under the right Ribs, and if the left under the left.

Ligatures made with Roulers, or the like to the Arms and Feet, do restrain the violence of the blood running to the Nose, and draw it from the Head, if they be tyed till the Part be red or pained; and this is better in the Fingers and Toes where there is less danger, it is dangerous in the Codds.

Frictions also or violent Rubbings of the Parts do draw down the blood.

We purge, when the Blood is too watery or cholerick, because cholerick blood pricks and provokes, and water makes it flow; and by cleansing the blood in an old Hæmorrhagy or Bleeding, we have done very much.

We purge with gentle things, for hot and sharp Medicines will inflame the blood after and weaken the Patient; and with things that bind, as Rhubarb, Myrobalans, Juyce and Syrup of Roses, Senna, and the like, or with stronger things mentioned when there is much Choller or water.

We use things that alter which are cold and drying, or thicken the blood, or with some other Property stay the flux.

The Decoction of five leaved Grass, Plantane, Shepheard-purse, Solomons Seal, Myrtles, Comfrey, Horsetayl, Mousear, Sanicle, Pyrola or Winter-green, and the like, mentioned in Wounds, with Lettice, Water-lillies, Sorrel, and Rose-flowers.

You may make Syrups of the Decoctions of the same, mentioned in Spitting of Blood; and these of Sorrel, Lemmons, Pomegranates, Quinces, and Water-lillies.

The Juyces also are good of these and the Plants, mentioned in Spitting of Blood, used as there is taught: and with those four Syrups and Juyces, as Pomegranate-wine and Vinegar, or used for Sauce.

Also the distilled waters of the same Plants, as of Sorrel, Water-lillies, and Roses, as there mentioned.

And the Pouder of the Troches there mentioned against Spitting of Blood are good here, or of stronger things then may be given for Diseases in the Breast. As, Take *Bole or sealed Earth two drams, Blood-stone, red Coral, each one dram; of Bulls or Deers Horn burnt, half a dram, Pomegranate-flowers and Plantane seed, each one scruple*: make a Pouder.

The Conserves are that of Roses which is old, Violets, Water-lillies, Succory, Sorrel, and Comfrey-roots candied &c.

Electuaries are made of these Syrups, and Pouders and Conserves, or that for Spitting Blood, that begins; Take *old Conserve of Roses, and Violets, &c.*

Potions are made of Syrups, Juyces, Waters and Pouders, or you may give those mentioned in Spitting of Blood.

To allay the expulsive Faculty of Nature, you may give Narcoticks, which will be proper, as we shewed in spitting of blood, or Pills of Dogs-tongue, Syrup of Poppies, or the Pouder there mentioned: And other things mentioned in the Colick, choosing those which are coolest, and have less hot things, with which they that do correct Narcoticks do ill, because they are hot.

You must put Astringents and Dryers into the Nose, or things that bring a Crust by burning a little, or that stop by glewing these, or snuffed up, or put up with the finger like an Oyntment: or are put into a Spunge covered with a Clout, or blown up. They are made as followeth.

Some Plants onely a little bruised may be put up, as Plantane, Horse-tayl, or the Root Shepheard-purse, Yarrow, Willow-herb, and other Astringents: Also Leeks, Basil, Nettles, Bettony, and Rue according to *Dioscorides*.

Also the Juyces of these Plants.

This following Pouder is good to be blown up, or put up with the white of an Egg, and a little Vinegar, or with a Clout.

Take *Frankincense two parts, Aloes one part*, make a fine Pouder; Spiders webs, or Touchwood, or Hairs of an Hare may be added, but because you cannot cut Hair so, but it will prick the Nose, you may leave that out.

Another. Take *Galls one dram, Juyce of Sloes, Dragons blood, Mummy, each half a dram; Varnish one scruple*: make a Pouder.

You may mix it with the former.

A third very strong. Take *Bole, Plaister of Paris, each one dram; burnt Vitriol and Allum, each half a dram*: make a Pouder.

You may use the Pouder of Troches of Amber.

Asses Dung is commended both dry, and the Juyces with Vinegar, adding the Pouders or Juyces aforesaid, and a little Hoggs Dung, which is as good as that of Asses.

The Ashes of Paper, Raggs, Hares Hair, Cotton, Spunge, Egg-shells, burnt by themselves, or with their Yolks; also of Snails and Froggs: also Soot is very good.

The Blood which flows if it be long stopped, till it clodder will stop the Veins. Also the same burnt with Egg-shells and their Yolks to pouder.

Spiders webbs alone, or mixed Mill dust, and Touchwood poudered fine: Also the Down of Willow-flowers, and other Plants, and of white Poplar, and other Down that sticks to Leaves, first steep'd in Vinegar and dryed, thrust into the Nose stop the veins, with the help of the congealed blood.

Also dip Clouts, or Cotton or Silk in Ink, such as they write with, and dry them, and put them into the Nose, or make them into Pouder.

And burnt Vitriol with Orpiment and Asses Dung, and the Juyces aforesaid.

The smell of strong Vinegar, with Camphire, is also good.

That Moss which sticks to old walls and tyles of houses, that is moist and sandy at the Roots, if you hold it to the Nose, and snuff up the scent which is cold and moist, doth stop bleeding at the Nose suddenly when all things fail.

Let him hold cold water in his Mouth, and renew it often when it grows warm.

There are things outwardly to be applied for stopping of blood at the Nose, which work both by manifest and hidden Qualities.

They which do it manifestly are actually cold, or potentially cold, which allay the Heat of the Blood, and by thickning it, keep it from flowing, and stop the Passages by binding. These are applied to the parts following.

To the sides of the Neck by which the veins and Arteryes ascending to the Head, pass to the inward branches of the Nose, to stop up the blood from flowing thither. And these do good applied to the Temples and Fore-head by cooling and thickning; they are made of the following Remedies.

Epithems are made of Water and Vinegar, a Clout being dipped therein, applying it very cold, with which you may also wet the Face.

You may add the Juyce of Plantane, and to make the Liquor stick better, the white of an Egg beaten or Mil dust, and instead of common water, the distilled water of Plantane or Shepheards-purse, and of other astringent Plants, and of Rose-water: The Juyce of Nettles applied to

the Temples doth also stop Bleeding at the Nose.

Other Applications that stick longer, are thus made. Take *Juyce of Plantane four ounces, red or Rose-vinegar two ounces, the Juyce of four Grapes one ounce and an half, Bole six drams, Dragons blood half an ounce, Pomegranate-peels or flowers, two drams, Wheat flower or Starch, one dram, three Whites of Eggs beaten,* apply them with Cotton or a Clout.

Another. Take *Galls one ounce, Frankincense, or Mastick and Varnish, each half an ounce; Juyce of Sloes two drams, Blood-stone one dram;* mix them *with convenient Liquor, as Juyce of Plantane, Shepheards-purse, Solomons Seal, Blood-wort, or other Astringents, or with Vinegar, and whites of Eggs, or the Infusion of Gum Tragath.*

You may add to these other astringent Powders, as of sealed Earth, Fullers-earth, red Coral, burnt Ivory, Asses Dung, or Swines Dung, Roots of Snakeweed, Cypress-nuts, Myrtle-seeds.

We shewed in the Cure of Ophthalmy or Redness of the Eyes, Emplasters that keep the Blood from flowing into them, and they are good here. As those that are to be applied to the Fore-head and Temples. Also the common defensative of Bole there mentioned, which is very good, if two of them be laid to the Jugulars on each side of the Neck.

Oyntments though they are weaker, may be used to these parts of astringent Oyls, as of Roses, Omphacine, Myrtles, Mastick, with the Juyces aforesaid, and Vinegar, and the astringent Powders.

Or that which is mentioned in Ophthalmy to be used after the defensative.

Cataplasmes of these astringent Herbs whose Juyce we commended, are good, applied to the places aforesaid, to which you may add others mentioned.

Cold things applied to the Stones, because they have many vessels that carry blood, and have great consent with the whol Body (as appears by the change of Constitutions in them that are gelt) do stop the bleeding at the Nose.

If they be washed with a Clout or Spunge dipp'd in cold water or snow-water, because it is less dangerous to the Stones then the Head, or with Vinegar, or the like mentioned.

They do the same applied to the Breasts, because there are also many veins.

Cooling of the Hands and Feet is also good, with Vinegar and Water, or wetting the wrists where the Pulses beat, or the Palmes of the Hands and Soales of the Feet therewith: Or hold Flints or Iron in the Hands, or the like, or apply Plates of Lead to the Feet.

The same do well under the Arm-pits, because the veins meet there. Or,

Plung the whol Body in cold water except the Head, to cool the blood; this is good for strong people in hot weather, but not for weak.

You must apply things that are potentially cold to the Liver to cool the Blood, especially if the Liver be very hot.

As those Epithems which are mentioned in the Cure of the Inflammation of the Liver, and of continual putrid Feavers; and the Oyntments there mentioned.

These following Amulets are said to cure the Bleeding at the Nose by an occult Quality, if hang'd about the Neck, or held in the Hands, so that they touch not the naked flesh.

Beads are thus used, made of precious Stones chiefly the Jasper, the Cornalian or Coral. These about the Neck cool the jugulars and soporal Arteries, and stanch blood.

The touching and wearing of some Plants is good, Periwincle, Shepheards-purse, Snakeweed-roots, Moss of a dead Man Skull, and of Box-tree.

They say the Carpe-stone held in the Mouth being cold stops bleeding at the Nose; it is thought to be a square Grisle between the Head of the Carpe, and the first spondil partly Bone, partly Grisle, and therefore it is found in the Palate. But there is another stone found in the brain of a Carpe near his Eye, like a half Moon harder then that is found in other Fishes as the Perch; Beads made of the Stones mentioned, cooled in water as they grow hot, held in the Mouth or applied. The Root of Periwinkle and of Dandelion held under the Tongue doth the same.

Nettles put under the Cap will stop bleeding at the Nose, also if the Fore-head be anointed with the Juyce thereof.

Also Periwincle with Salt, or Niter or Vitriol beaten and applied to the Head or Fore-head.

Because Imagination doth much, I shall tell you what some say, *viz.* That if you write with the Blood upon the Fore-head, *It is finished*, it shall stop. I shall omit the other as superstitious and wicked.

The Diet must be as followeth, because some things hurt, and others do good.

Let him be in cold Air rather then hot, not too light or near the Sun-shine, because it tickleth the Nose, and moves the expulsive Faculty to neesing; as also strong Scents; the vulgar think that beholding the Blood or red Colours doth also provoke bleeding; but this may be from Imagination.

Let his Meat be such as keeps the blood from being thin, gross and glutinating, of young Beasts feet well boyled, and the like, green Cheese, but a little salted, Rice, Barley, and binding Fruits, as Quinces, Pears, and cooling Pot-herbs, Endive, Lettice, Purslane boyled and crude in Sallets: Let him take heed of spices and salt.

Let him drink water and not wine, except the strength fail. And though he cannot abstain from wine, that is very subject to bleeding: let him beware of Drunkenness. And let his wine not be strong, but red and mixed with water, and somwhat sharp.

Rest is good, for Motion will cause the flux to increase, therefore let the parts especially near the Nose be at rest. Let him not speak much or loud; and not chew violently any hard thing.

Let him ly with his Face upwards, his Head backwards, that the Blood may go back, and it will do good, provided the blood fall not into his Mouth, or descend farther which is worse.

A sudden Commotion or Passion of the Mind draws the blood in, and stops it. This you may do by a fright, if his strength will bear it. Fainting and Swounding doth it better, and presently stops Bleeding. But this we shal not advise to be forced because of the Danger. But when it comes of it self from an over bleeding, we have observed that it hath often stopped the blood.

The Cure of the over flowing of the Courses and other Fluxes of the Womb.

Bleeding at the womb which is Natural to Women, if it be somwhat too violent, because some Bodies require more, some less, if it cause no Distemper, is not rashly to be stopped. But if you fear Diseases as Dropsies, then you must stop in time. And as if the Terms flow more violently and oftner then usual; Or when they have long been stopped with a swelling in the belly, they break out violently in great quantity, and with great weakness and danger of life. Or if the purging after Birth be too great, especially after Abortion, which is no less dangerous. That Flux which women have in age when their Courses have left them is preternatural, and cannot continue without harm, must be also stopped, and the rather if it be large, often, and of long Continuance. That bleeding which comes from external violence, especially from Copulation, if it be at the loss of Maiden-head, because it is not much, and hurts not, and is a good sign is not regarded, especially if the Terms come the sooner for it. But if it be great and from some great hurt, either at the first or other Copulations, it must be stopped.

That bleeding which comes from the tearing of the neck of the Bladder in a woman when a Stone is taken out, requires no other Cure but that of other wounds.

The

The Cure of all Bleedings at the Womb is by Evacuation of blood, and turning it from the womb, with things that make it more pure, thicker, and less flowing, and stop the places by which it is carried thither. Or that act by a hidden Property, you must proceed according to the cause with some of these, as considering whether it came by violent use of hot and sharp Meats, the violent Motions of Body or Mind.

Blood-letting is good to prevent it in those that are subject to it, if it be in the Arm, and in women with Child, if they formerly had the same in Child-birth, for it hath bin so often used to the same woman, being full of blood and hath not taken the Nourishment from the Child, as some suppose.

In the time of the Flux to drive it back, it is good to open a Vein in the Arm, or Hand or other place above, not below, for in the Foot it provokes the Terms. And you must take a little at a time and by degrees, for much will weaken.

Great Cupping-glasses, or many little ones are applied under the breasts to draw up the blood, because the Veins there, and of the womb consent. And they may also be applied to the right side, and to the shoulders. Frictions of the extream parts, are here also good.

If water in the blood causeth it to be fluid, you must sweat often in dry baths before the flux to prevent, but in the flux it will heat and move the Humors, and do more hurt then good.

If there be Water and Choler in the blood which causeth the flux, you must purge them away. But this is better to prevent before the flux comes from them; you may use the stronger Medicines, which you cannot well do in the flux, because it would more weaken, and inflame the body, and by moving it, increase the Flux.

And then if the belly be bound, use gentle Lenitives, that leave an Astriction, as Rhubarb, Myrobalans, and the like, mentioned in Dysenteries.

And this Potion. Take *Tamarinds and stoned Prunes, each six drams; yellow Myrobalans half an ounce:* boyl them *in Water and the third part Wine,* and when it is strained, *infuse half a dram of Rhubarb, of Spikenard one scruple,* strain them, and add *Syrup of red Roses dryed one ounce,* give it at once. It will work better with a little Senna, and not stir up Nature much, because the Juyce being taken out by Decoction, is very like the Juyce of Rhubarb, and of Saffron Colour, by which we gather that it doth not differ in strength: And because it is used as Rhubarb in many diseases from Choler.

Or this. Take *yellow Myrobalans poudered two drams, infuse them in red Wine, with one scruple of Spike,* strain them, add *Syrup of Roses solutive one ounce, Rhubarb finely poudered two scruples, or a dram,* give it at one dose.

Half an ounce of Tryphera Persica taken doth the same, because it hath many astringents, and things that allay the heat of the blood.

It is not safe to give other hot and sharp Compositions which have Scammony, or Agarick, or Turbith, in a great flux, because by pricking, they force the Terms.

We give things that alter which thicken the blood, and allay its heat, and bind the Passages, and stop it. Many whereof have been mentioned in the Bleeding at the Nose, and Spitting blood which are good here, but these are chiefest that follow.

Let them eat things that breed thick blood, of Flower of Bread-corns, and Pot-herbs of glutinating flesh, and green Cheese; to which they add sour Milk, and Eggs, and the like, mentioned in immoderate Pissing.

Let them use astringent Fruits crude or boyled, or divers Sauces made hereof, as Quinces, Pears, Services, Cornel-berries, Medlars, Mul-berries, Black-berries, Sloes, Straw-berries, Currance, Myrtles.

Of Pot-herbs, Purslane, Lettice, Endive, Succory, Sorrel, Plantane; boyled in broath, or raw in Sallets: to which you may add other plants, mentioned in the Decoction which tast less like Physick.

Let him drink Decoctions often, and if they must be kept, boyl them to Syrups.

The best ordinary Syrups are of Myrtles, and red Roses dryed.

Or this Decoction. Take *Comfrey roots one ounce, Plantane with the Roots, Shepheards-purse, Yarrow, each one handful; red Rose flowers one pugil, Pomegranate flowers two drams, Myrtle and Plantane seeds, each one dram;* boyl them in Rain-water, add to the straining, as much Sugar as will make a Potion for three doses, or boyl it to a Syrup with Sugar.

Decoctions may be made of divers others, mentioned in Bleeding at the Nose, as of Herbs for the vulnerary or wound-drink, of Winter-green, Agrimony, Horse-tayl, Sanicle, wild Tansey, Mouse-ear, Comfrey, Solomons-seal, Straw-berries, Bears-ear, Sumach, Shepherds rod, Lung-wort, Blood-wort, Burnet, Sorrel, Purslane, Moon-wort, wild Basil, Mints, Arsmart, Phœnice, Rock-Comfrey, flower, Leaves and Roots, Myrtle leaves, Mastick leaves, Olive leaves, Oak leaves, Brambles; also Roots of Avens, Ras-berries, Water-lillies, Sulphur-wort, Sanders, Brasil, Lote-tree, Olive-tree, Pomegranate-peels, Roses, Grapes,

The Indian Millium-flower gentle.

Some Juyces are given, either crude or boyled to a syrup, as those of sour Fruits, Quinces, Pomegranates, Currance, Bar-berries. These Juyces with Sugar may be set in the Sun, and so they will have a tast and scent like wine. These Juyces are made into Lozenges with Sugar, and are very delicate, with Rose and Plantane water and the like. And instead of these, you may use other sour Juyces, as of Citrons &c.

You may likewise use the Juyce of some plants by themselves or boyled, as of Plantane, Sorrel, Purslane made into Syrups; and of Shepheards-purse, and Yarrow; and as *Dioscorides* teacheth, the Juyce of Water-bettony, and Goats-beard, and Arsmart.

Waters simple or mixed, are of Plantane, red Roses, Shepheards-purse, Purslane, Sorrel, and the like above-said.

Some approve the water of Snails: and that wherein Iron is quenched.

Mucilaginous or slimy things also, as whites of Eggs, Mucilage of Quince-seeds, Gum Traganth &c.

The old Conserve of Roses, and Tablets of Pouder of red Roses, with Sugar candied, or conserved Comfrey-roots; also the Conserve of Peach-flowers: or others of Sorrel, or of the Plants mentioned.

These following Troches may be taken with sugar of Roses, or with wine and water, or in Electuaries, or Potions.

The troches of Amber, thus made. Take *Amber, Gum Arabick, Traganth, Mastick, Frankincense, Lacca, Acacia, or Juyce of Sloes, burnt Harts horn, Coral, Pomegranate-flowers, black Poppy-seeds, Saffron and Mucilage of Fleabane.*

The troches of *Terra Lemnia.* Take *Terra Lemnia, Bole, Blood-stone, Coral, Pearl, burnt Horts horn, and Ivory, Amber, Gum Arabick, Traganth, Frankincense, Juyce of Sloes, Dragons blood, Roses, Pomegranate-flowers, Seeds of Purslane, Roses, black Poppyes, Galls, burnt Starch, Plantane-water.*

The troches of burnt Ivory. Take *Spodium, or burnt Ivory, Gum Arabick, Seeds of Sorrel, Purslane, Coriander, Grains of Sumach, Bar-berries, burnt Starch, the Juyce of Grapes.*

Instead of which you may make these pouders following, as this of Plants. Take *of the Leaves of Plantane or Agrimony, or Horstayl, Myrtles, or Oak, Roses, Pomegranate flowers, each one dram; Seeds of Plantane, Sorrel, or Docks, Purslane, Coriander prepared, Cummin torrefied, each half a dram; Cypress-nuts, Galls, Myrtle-berries, Bar-berries, Sumach, Pomegranate and Grape Kernels, each one dram; Hazle-nuts, Chesnuts or Acorns, each one scruple; red Sanders, Cypress-nuts, each half a dram; Spike half a scruple, Acacia, Gum Arabick, Frankincense, Mastick, Dragons blood,*

each

each one ſcruple: make a pouder. Which with the Infuſion of *Gum Traganth in Roſe or Plantane-water,* make into Troches.

Another is thus made. Take *Amber, red Coral, Bole, or Terra Lemnia, each one dram and an half; Blood-ſtone half a dram, Pearl one ſcruple, burnt Harts horn, and Ivory, each one dram, Cuttle-bone half a dram, burnt Egg-ſhells one ſcruple:* make a pouder.

This is ſtronger. Take *Corke, Pomegranate peels, Dates, Roſes, Mary-thiſtle, Acorns, roaſted Cheſnuts, Berries of bloody Rod, Nut ſhells, burnt Date ſtones, Aſhes of Bee-nettle, dryed Mulberries, Services, Cornil-berries, Medlars, Lemmon Kernels, and of Sea bull-ruſhes, Water-lillies, Piony, Juniper-berries, Mummie, the Runnet of a Kid and Hare, Snakes skins, precious Stones, Jaſper, and burnt Oyſter-ſhells:* Some add *the filings of Iron.*

There are divers Mixtures of the aforeſaid, as Juleps, Waters with Syrups, or Potions, Decoctions, Pouders, Electuaries, Conſerves, Syrups.

You may make pills of thoſe that are unpleaſant, that they may be the better taken, or of prepared Steel or Iron quenched in Vinegar, not in Aqua fortis, as Crocus Martis is made, though ſome ſay this makes women barren: Alſo of dryed Goats dung. To which you may add other things, and with Syrup convenient, make pills.

Some women ſay this is experienced, you muſt ſwollow nine turds of the greater ſort of Mice.

Alſo things mentioned for the Hæmorrhoids are good here, as pills of Bdellium, Micleta, Electuary of Myrtle-berries, or the Conſection of Rhaſis, made of Filings of Iron.

Narcoticks ſtop the Terms as well as other Fluxes, and becauſe they provoke ſleep (which ſtops all fluxes but Sweating,) they are good. You muſt give thoſe Compoſitions that have Opium beſides the things that ſtop blood, as Troches of ſealed Earth, of Amber, with Opium, and Diacodium Galeni, Philonium Perſicum, and others that have Terra Samia, Lemnia, Bole, Coral, Starch, Juyce of Sloes, pomegranate flowers, Juyce of plantane, with Henbane ſeeds and Opium. There are other Narcoticks, as Syrup of poppies, the Decoction of poppy topps and the like, mentioned for the Colick, with things which ſtay fluxes, as Syrup of Myrtles, Bole, Acacia, it is good to give one ſcruple of Henbane ſeeds with ſome of the ſame, or as in the Spitting of Blood. Some give poppy ſeeds inſtead thereof.

Outwardly you may ſtop the blood with Oyntments and Applications to the Reins and privities.

Anoint them with Oyl of Roſes, Myrtles, Quinces, Maſtick.

Or Oyl wherein four and unripe Fruits have been boyled, as pears, Sloes, Medlars, Cornil, and Service-berries, or Juyce of plantane, Shepheards-purſe, Solomons-ſeal, Leaves of Brambles, Oaks, adding red Vinegar as much as Oyl.

Some think that Stupefactives to the womb are good, as Oyls that do take away ſenſe, as Narcoticks, and ſo they ſtop Fluxes, and not by cooling. Oyl of Henbane or the like, wherein Opium is diſſolved, or Barks of Mandraks, and the like.

Of Oyntments, that of the Counteſs is the beſt, made of theſe following boyled in Plantane-water, as inward rinds of Acorns, Cheſnuts, Beans, Celandine, Snakeweed, or Tormentil roots, Horſtayl, Capars, Sloes, Medlars, Acorn cupps, Galls, Myrtle-berries, Grape ſtones, with Galls, Aſhes of Ox bones, Troches of Amber, Oyl of Myrtles and Wax.

The uſual Oyntments are of Roſes, that cooleth the Reins. Such take away the Heat from the Blood which is ſent plentifully from the Emulgents to the Kidneys, and ſo ſtop the Flux.

Alſo the Plaiſter againſt the Rupture, applied before and behind to the Region of the Womb.

Or this Oyntment. Take *Biſtort, or Snakeweed, Tormentil, Galls, Acorn cupps, Cypreſs-nuts, Pomegranate peels, each one dram and an half; Pomegranate flowers, Myrtle-berries, Grape kernels, Acacia, each one dram; Dragons blood half a dram, Bole one dram and an half, red Coral one dram, Maſtick two drams, with Oyl of Roſes or the like, in which Vinegar hath been boyled, and with Wax* make *an Oyntment, or with Roſin and Pitch an Emplaſter.* Theſe may be alſo applied to the Soles of the Feet.

The Troches of Amber, ſealed Earth, Ramich &c. are better inwardly then outwardlp uſed.

You muſt uſe Fomentations about the Privities, or baths to ſit in, of the Decoction of theſe, Roots of Snakeweed, Tormentil, five leaved Graſs, Acorus, Comfrey, Pomegranate peels, Plantane, Shepheards-purſe, Solomons-ſeal, Brambles, Horſtayl, Sumach, Mullein, Tamariſk, Sage, Mints, red Roſes, Pomegranates, Galls, Acorn-cupps, Cypreſs-nuts, Myrtles-berries, Sumach, Sloes, Acacia and other four Fruits, and if ſtronger is required, burnt Chalk, Bole, Allum, or Vitriol: boyl them in Iron-water, or red Wine, and a little Vinegar.

An Epithem to be laid to the part, is made of Plantane-water, and Shepheards-purſe two parts, and one of Vinegar, it is good alſo laid to the Soles of the Feet with a Spunge, as alſo Allum boyled in Vinegar.

Apply this Cataplaſm. Take *Plantane, Shepheards-purſe, Rupture-wort, Mints, each one handful;* boyl them *in red Wine,* beat them, add *Lentil meal half a pound, Goats, Aſſes, or Hoggs dung dryed two ounces, Juyce of Sloes half an ounce, Dragons blood, Frankincenſe, each two drams, burnt Chalk and Bole, each one ounce:* mix them *with the white of an Egg, and Vinegar,* and apply them to the Region of the womb, or *with Oyl of Roſes and Myrtles.*

Things put into the womb, do well to ſtop the Mouths of the Menſtrual Veins if they be open: alſo Injections are good if the Flux come from the bottom of the womb, for their vertue will reach thither.

They are made of the Decoction mentioned for a Fomentation; Or of the Juyce of Plantane, Shepheards-purſe, Yarrow, Horſtayl, Solomons-ſeal, with the like.

Or this. Take *of the Decoction or Juyce of the Plants mentioned one pint,* ad *Juyce of Sloes, or four Grapes ſix drams, Dragons blood two drams, Bole half an ounce, the red Juyce which is taken from Grinding of a Blood-ſtone half an ounce, Aſſes or Hoggs dung two drams:* make an Injection, it is better with a little Vitriol.

Or the Decoctions or Juyces of Herb Willow, Goats beard, Coriander, Yarrow, Rue, Houſleek.

Peſſaries are made of the Oyntment of the Counteſs, or the Linaments mentioned with wool: Or of the Plants mentioned, as Plantane in a bag.

Or thus. Take *Galls one ounce and an half, Acorn-cups one ounce, Starch, Roots of Snakeweed, or Tormentil, each half an ounce, Pomegranate flowers, Myrtle ſeeds, each two drams, Frankincenſe three drams, Acacia, Dragons blood, each two drams, Blood-ſtone one dram:* pouder them finely, *and with the White of an Egg. Juyce of Plantane, and Vinegar* make *a Peſſary.*

Or, Take *Pomegranate peels one ounce and an half, Cypreſs Nuts one ounce, Meal of Lentils, Roots of Docks, each half an ounce; red Roſes and Sumach-berries, each two drams; Maſtick three drams, Mummy and Juyce of Sloes, each one dram and an half; Gum Arabick one dram, Bole or Oaker half an ounce, Allum or Vitriol one dram, dryed Goats dung two drams* mix them in pouder, *with the Infuſion of Gum Traganth, with Juyce of four Grapes, or Wine-Lyes for a Peſſary.*

You may add aſtringent and drying Pouders, of Roots and Herbs, Aſhes of an Oak, Down of Willow flowers, and the like, the pulp of Wolves fat, Spiders webbs, Hares dung, Ruſt of Iron, Coral, Troches of Amber, of ſealed Earth, with Micleta.

It is experienced by ſome Women that a Peſſary made of hot aſhes, and hot red Wine, with Juyce of plantane cureth: but one ſpoyled her privities by applying it too hot.

Let her take this Fumigation from the hot Decoction. Take *of Frankincense and Mastick, each two drams; Labdanum one dram, Amber, Cypress-nuts, red Roses, Pomegranate-flowers, each half a dram; Spike one scruple, with Gum Arabick infused in Rose-water,* make troches.

Also the Fumes of an Asses or Horses hoof, Shoe-soles, and burnt Harts horn, with Frankincense and Mastick to make them smell sweet.

Also the Fume of Vinegar from a hot Iron.

Also the Vapors hat comes from a piece of green Oak warmed hot, and sprinkled with Vinegar, put between the Leggs.

Things also applied to the Liver when it is too hot, and weak, as Oyntments, Cerots, and cooling things that strengthen it, are good, as in bleeding at the Nose, and Inflammation of the Liver, especially that Cerot of Sanders.

These Amulets stop blood, hung about the Neck, or held in the Hands, as Blood-stone, red Coral, Cornelians, Onyx, Jasper; also the great Celandine, wild tansey, Sorrel, perwinkle, tyed to the Leggs and Thighs Eggs beaten, and Cotton dipped therein, tyed to the Soles of the Feet, and renewed when they are dry.

The Cure of the preternatural Flux of the hæmorrhoids.

The Flux of the Hæmorrhoids, though it be troublesom at the first, yet must it not be stopped, because it cureth many dangerous Diseases, and prevents others.

But if it do weaken by being too large, too often, or too long, then you must moderate and stop it. And it is done by Evacuations and Alteratives, as the terms over-flowing are cured.

There are divers Evacuations, and Blood-letting is good when it abounds in the Meseraick Veins, and though the blood comes not from them, because they reach not to the skin, but because the hollow Vein is emptied thereby, and then takes blood from the Meseraicks, it must be good. Especially if it be taken in great quantity from the Arm or Hand, or from the Legg or Foot, by which means the flux will not be provoked as in the terms, because these Veins are not continued from the Hæmorrhoids, as from the Menstrual Veins, and therefore it will rather stop by Revulsion then increase the Flux.

Scarifications, Cupping-glasses, Frictions, although they cause Revulsion in other fluxes, when the blood comes from the branches of the hollow vein, yet in this they do no good, because they can neither draw the blood from the hollow vein, or from the Meseraick, you may purge when the Body is bound, least straining provoke them, with Laxatives mentioned in want of Stools. You may also purge the Humors, if the Hæmorroids flow frym too much Choller in the Meseraicks, or the like, to prevent when any are subject to them, and to hinder yellow, or black Choller which is made of the yellow, and not of blood; this is best before the Flux, when those Excrements lying in the first passages, are sooner carried into the Guts.

Nor must you neglect purging, when the Hæmorroids flow, to keep the Excrements from increasing the Flux, with such things which stir up Nature to stool, and yet provoke not the Hæmorrhoids or Pills, with gentle things that leave a binding, and not with strong and hot. But such as are mentioned in the over-flowing of the terms, as Rhubarb, Myrobalans, Syrup of Roses, and the like, also Tryphera persica.

Then we proceed to alter, with things that thicken, asswage, and stop, as in the immoderate terms.

Many things may be used here, as in the terms, as those Meats which make thick blood, and make it less hot and cholerick, by which the blood in the Meseraicks will be more temperate, and flow less.

The Medicines there mentioned are good here, as the Decoctions, Syrups, Juyces, Conserves, pouders, Mixtures, whose vertue going by the Guts to the Meseraicks and Hæmorrhoids, which joyn to the Guts, doth sooner worke then in any other Flux.

Micleta is also good, made of parched Myrobalans, Pomegranate-flowers, Water-cresse seeds, Cummin, Anise, Fennel, Ameos, Caraway seeds steeped in Vinegar, the Medicine used for Spodium called Antispodium, Mastick, Gum Arabick, pouder of Sumach, Syrup of Myrtles.

Also Electuaries of Myrtle-berries, Myrobalans, Anise, Cummin, Smallage seeds steeped in Vinegar and Syrup of Quinces.

Also the Confection of scales of Iron of Rhasis, of Myrobalans, Schænanth, Cypress, Ginger, Pepper, Ammi, Frankincense, scalls of Iron.

And chiefly pills of Bdellium, Amber, Sea-snails, Ammeos seeds, and Juyce of Leeks, and others of Myrobalans only, and Bdellium, with Rust of Iron.

Narcoticks are good, if the expulsive Faculty be stirred up too much to stupifie it, they are mentioned in the over-flowing of the terms.

Outwardly these are applied to shut the Veins of the Fundament.

You must foment with Decoctions made of Mullein, which is specifical and proper, boyled in red wine, and Iron-water.

To which you may add things mentioned in the over-flowing of the terms.

As Cataplasms there mentioned, or the Fomentation, with Hog-fennel, and Perwincle.

Or this following easie to be made. Take *Mullein, Plantane, Oak leaves, each one handful, Houseleek, or Night-shade one pugil*; boyl them *in red Wine, and Iron-water,* ad *Oyl of Myrtles one ounce and an half*. make a Cataplasm.

You may add the pulp of Quinces, Medlars, and of other astringent Fruits.

Also apply Oyntments, Cerots, and Plaisters to the Fundament, as the Oyntment of the Countess, plaister for Ruptures.

Or this: Take *Snakeweed roots two drams, Galls half an ounce, Frankincense two drams, Acacia, or Dragons blood one dram and an half, Bole half an ounce, Rust of Iron two drams,* make *a fine Pouder*, and add *Oyl of Roses Omphacine, or Myrtles, or Oyls in which the Juyces of Mullein, Plantane, Shepheards-purse, Sparrow tongue, or Brambles, or Basil, with red Vinegar have been boyled, and with Wax* make an Oyntment, or Cerot, or with Rosin, an Emplaster.

There is another Oyntment or Plaister which is good here, and the dripping of a roasted Eel, is excellent therewith.

This plaister is stronger without Oyl, take those pouders, with Amber, and the White of an Egg, or Mucilage, of Fleabane seeds, or Infusion of Gum Traganth, in plantane-water, and let it be applied and renewed before it be too dry: Or to keep them from drying, mix them with Syrup of Myrtles, or other Astringents.

Mix also other pouders if you please, as of the Stones of Myrobalans, burnt Spunge, Hedg-hogs, Chesnuts, Ashes of Hare-foot, Mummy, Amber, Mastick, burnt Harts-horn, Eggs and shells, Cerus, Antimony, Lytharge, Bloodstone &c. also Soote of a Chimney.

This plaister stops it excellently. Take *Aloes, Frankincense, Bole or Chalk, each half a dram, Dragons blood, or Juyce of Sloes two drams*: mix them with Syrup aforesaid, and apply often renewing it, least it should stick too fast.

Things are put into the Fundament to close the Veins, as those Oyntments and plaisters with Cotton, or Spunge, or the pessaries, mentioned in the flowing of the terms.

And if these come forth by their sharpness, use these suppositories. Take *Colophony, Frankincense, each three drams; Bole half an ounce, Cerus, burnt Lead, each one dram; Acacia half a dram,* pouder them finely, *and with the White of an Egg, or other Glew or Wax,* make a Suppository.

The Mush-room called Wolfes-fart, being dryed and poudered fine is good; also Spiders webbs, and Hares hair.

You may inject with a Syringe, with things made of plantane, or the like, mentioned in the Flux of the terms

Mans blood, or other Blood injected, doth wonderfully ſtop the flux of the belly. Sheeps Lungs hot applied to the Fundament, is alſo good to ſtop Bleeding.

Alſo a Fume of Decoction of things mentioned, taken into the Fundament, and of Bdellium, and things mentioned in the Dyſentery.

Alſo if the Vein appears, when the Patient ſtraineth, you may apply ſtrong aſtringents, as Bole, burnt Allum, Vitriol, and the like, or things that burn a little, when there is Neceſſity, but warily, leaſt you hurt the ſtrait Gut, as the Pouder of Roots of Cabbage, Dogs dung, burnt Wine-Lyes, burnt Vitriol. It is an excellent Remedy to touch the Vein with Oyl of Vitriol, or in great Deſparation with Aqua fortis. It is dangerous and unprofitable to uſe other potential Cauteries, becauſe they cannot ſtick long. But the actual Cautery, is the onely laſt Remedy with a touch.

Alſo if you take up the vein with a forceps, and ſew it with ſilk.

You muſt apply cooling Oyntments that ſtrengthen to the Liver and Spleen, when they are too hot, becauſe the Meſeraicks are in them: ſuch as are mentioned in the Inflammation of the Liver.

The Leaves of black Hellebore, green, and bruiſed, and tyed on, like a Girdle next the skin, and renewed when they are dry, do cure this flux, as well as the terms, and flux after birth.

The Cure of bleeding from divers Orifices

The Cure of bleeding is different according to the divers parts and veins.

If blood flow from the adnate tunicle of the Eye being hurt, or from a wound: the Cure is mentioned in the hurt of the Eye.

If blood flow from the Ears, from hurt by things put therein, it is treated of in the Wounds of the Ears: if from a Contuſion in the Head, that muſt be firſt cured, becauſe it is moſt dangerous.

If blood come from the Yard by a Catheter put in, or by the paſſing of a Stone through; it is not worth the Cure, but if Heat of Urin follow, or there be fear of an Ulcer, that is to be prevented with things mentioned in their proper place.

Bleeding of the Neck of the Bladder in a Woman, from the taking out of a Stone, requires no other Cure but to aſſwage the pain, as in other wounds, for it will ceaſe of it ſelf.

If the Privities bleed from hard travail or violent Copulation, you muſt cure it as other bleeding at the part by Anaſtomoſis. If the Hæmorrhoids bleed from ſending forth, or taking in any thing, you muſt cure it as formerly mentioned. But if it bleed little, you muſt reſpect the wound more then the bleeding. But if the terms flow at the Fundament from a fiſtulated Ulcer which pierceth the ſtrait Gut, it is to be cured as a Fiſtula.

The Cure of bleeding by Wounds.

You muſt cure bleeding of wounds in the external parts according to the part wounded.

If it be from the skin taken off, it is not worth the Cure; for it will ceaſe of it ſelf, or with little trouble. Alſo it is eaſie to ſtop a vein, either opened by art, or broken. But if a great vein be cut, or an Artery, it is hard to be ſtopped; if the Artery be ſmall, for I have known a great flux of blood not to be ſtopped from the tearing of a ſmall Artery, at the drawing of a tooth, and one dyed thereof. And the reaſon was becauſe the Artery lay ſo deep, that the medicines could not be conveighed to it. And therefore in wounds they hurt the internal part, becauſe it is dangerous to fill up the Cavities with medicines, in which the blood lyeth, it is impoſſible. In other wounds though great, and with a great flux, yet is blood eaſily ſtopped, becauſe medicines may be applied. In the ſtoppage of all which we proceed as followeth.

We revel or draw back the blood from the part whence it flows, and turn it another way to abate its force: By Letting blood, Scarifying, Cupping, Ligatures, Frictions, as in other fluxes. And that in the remote parts from that which bleeds, if we intend Revulſion, or in the adjacent part, if we intend Derivation.

We hinder the flowing of blood to the part, by applying upon the Paſſage of the Veins not far from the womb, Epithems, Unguents, Plaiſters, which may bind the Paſſages, and cool the Blood, and repel or drive back, and thicken: ſuch as were mentioned in other fluxes, as of the Noſe, to the ſides of the Neck of the Eyes, to the Fore-head and Temples.

For the ſame you may cut off the Vein firſt above, opening the skin gently, and laying the vein bare, and binding it at both ends, that it go not back, but this is not to be done but at laſt, and when all fail.

Or when the Vein is bare, bind it till it ceaſe.

We ſtop Veins with Aſtringents and Cauſticks, by Ligatures we do not only keep things on that are applied, but hinder the flux; theſe Ligatures are to be made as we ſhewed in the Cure of Wounds.

Surgeons uſually ſtop Blood with a Bolſter of Lint, and good Ligature only.

Bleeding is alſo ſtanched by preſſing the wound if narrow, with the finger, by which means the blood ſtopped congeals about the wound, and hinders the flux.

We keep it from flowing, by keeping up the wounded part above the reſt.

Alſo by ſtuffing it if deep, we ſtop or reſtrain it, this is done with ſoft Lint. And if things be added that will alſo ſtanch blood, it will be the better, as theſe following.

Spiders webs thruſt into ſmall wounds of the skin, becauſe being light and thin, they get into every part, and ſtop the blood, not ſo much by drying as by filling the part, and glutinating the Lips, by help of the blood which grows hard, and theſe are better with Mill-duſt.

The Down of Flowers and Fruits, and Cotton, or Lint, with Hares hair, are good with Plaiſters that ſtanch blood, but without well cleanſed, if put into ſmall wounds.

The round Muſh-room or Fuzball, being very light, laid upon the vein, or thruſt into the wound, ſticks cloſe, and keeps the Blood from flowing, eſpecially mixed with other Pouders, or Plaiſters.

The ſpungy skin in old Trees between the Bark, or Touch-wood laid upon ſmall wounds, is alſo good.

Alſo a Spunge laid on, or thruſt in, if the wound be large; And if the Artery be dilated as in an Aneuriſm opened, and bleed; becauſe it requires large ſtuffing, a Spunge is good; yet the flux was ſo great, and the Oriſice ſo large, that the Spunge would do no good to one Man, but he bled to Death of an Aneuriſm opened.

There are divers things laid upon the part: firſt ſuch as dry, bind, and glew, as the Pouders alone, or with Lint, or the like, or with Glew like a Plaiſter, either laid upon the Vein or Artery, or upon the wounds, or put in when it is deep, and bound on, for divers dayes, till the fear of bleeding is over, and then after gentle moiſtning taken off. Alſo if the wounds be deep, a Plaiſter is put in. And when it is after cutting off an Arm or Legg, let the pouders be put into a Bladder, and laid on, and the Bladder tyed faſt about. Thoſe Plaiſters were mentioned in the Cure of Wounds, and they are to be applied at firſt to ſtop the flux, and heal the wound. As that of three parts of Bole and Frankincenſe &c. to glew the lips of the wound; and to heal them, as that with Frankincenſe and Myrrh; or that of *Galen*, which is one part Aloes, two parts Frankincenſe, with the White of an Egg, and Hairs of an Hare; and others there mentioned, beginning thus. Take *Galls &c.* Or, Take *Colophony &c.* Some that are mentioned againſt Fluxes in the Eyes, are good here, as that which begins thus. Take *Maſtick, Frankincenſe, &c.* Or, Take *Bole half an ounce, Sanguis Draconis &c.* without Oyl of Roſes. Alſo Pouders of burnt things, aſhes of Froggs, Worms, Aſſes or Horſes dung, Eg-ſhells, Spunge, Rags, Cotton, Paper, Nettles. Alſo Soote, burnt

burnt Blood, Rosin poudered, Gum Arabick, and Traganth parched. Also Blood-stone, Stibium, burnt Lead. Also other fat Earths besides Bole. And Downs mentioned; of Flowers and Fruits, as that in the shells of Chesnuts, or Cotton, Down, or Lint: All which mixed with the Pouders mentioned for Plaisters, and incorporated with the things mentioned, may be applied like a Plaister. Or you may apply the pouders with the Juyce of Plants, as of Plantane, Solomons-seal, Shepheards-purse, or Blood made into a past, with some Glew or Rosin to make it stick.

There are other Fumes, as that which we saw stopped presently, the blood of a Theif that had both his Hands cut off; It was thus made: The Wife of the Executioner put the wrist where the hand was cut off into a Hen, in which she had made a large Orifice about the Rump, and tyed her with the feathers to the part, and so he lived till he was brought to Execution without any great loss of blood. And this Course have I taken often with good success, when fingers have been cut off.

This remedy may be used in other parts, by tying it fast upon the part, when it is cut or slit in the middle, whether it be Hen or Chickin, or the Lungs of a Sheep bleeding, or other fresh Entrals; such as we prescribed for the Cure of a Phrensie.

Also Mans blood, or other blood hot, and mixed with Bran to a past, may do the same.

A Linnen-clout three or four times doubled and dipped in Frogs-spawn when squeesed, will surely stop blood: and it is usual to keep Clouts dipp'd in the Spawn of Froggs at the time of the year, for the same purpose.

The last remedies are Caustick, which cause an Eschar, and stop the Blood.

Burnt Vitriol is the best, or Copperas what Colour soever it is of; or burnt upon a hot Iron till it be red, which the Chymists call *Colcothar*, with burnt Allum, and burnt Tartar, or Wine-Lyes. Or if you will have it burn more, a little Arsenick, or Sublimate, which you may apply with the White of an Egg, and a little Lint.

Quick-lime poudered doth the same, which you may make of more force with the other.

Somtimes we add other astringents, which allay their violence, and by straitning the part, stop the blood, as that pouder for healing Plaisters for Wounds, which begins thus. Take *burnt Bones &c. also Vitriol, and burnt Allum.* Also things which are used to take down proud flesh, which begins thus. Take *burnt Allum three drams, Pomegranate-flowers &c.* Or, Take *Vitriol half an ounce, Allum &c.* especially the corroding pouder there mentioned.

The Spirit of Vitriol dipp'd in Cotton, and applied to the Vein, doth astringe and somwhat burn; which if it ly deep, must be stopped in, as you do for an hollow tooth.

Aqua fortis doth it more powerfully, so applied, and burns more. Of which sprinkled upon filings of Iron, you may make Crocus Martis from the yellow Colour so called; which you may use for the same.

Clouts wet in Vinegar or Steel-water, wherein the Physical Stone hath been quenched, and dryed. Or in Aqua fortis, or Oyl of Vitriol often dryed and wet, will do the same.

The actual Cautery is the last, which will presently stop Blood, if you can touch the Veins or Arteries. This is done with a hot Iron proportioned to the wound, either small pointed, or flat, or with a round bottom, for great wounds: such as are used in Dismembring. But this is done with small success, especially when the amputation or cutting off is in a thick fleshy part, because the burning reacheth not to the Veins, but only to the flesh. And by this lingering before the Plaister is put on, there is a great loss of Blood; and the new pain which comes after the pain of amputation, doth much weaken the Patient.

If you thrust the remaining part of a finger cut off into melted Pitch, and presently pull it out, it will stop Blood, not only by the burnining of the wound, but by the sticking of the Pitch thereon, which will grow hard, and stop the Veins. And this you may do in other parts.

If you lay Cotton upon the wound, and set it on fire, it will by the flame insinuating into the wound stop wonderfully, and the rather if it be dipped first in Oyl of St. Johnswort.

You may stanch Blood by Potions which we use for the Cure of Wounds, for they thicken the Blood by a drying vertue, which healeth, and also stoppeth the Flux, especially if you mix things proper to stop blood. As that Potion for a wound from a Contusion, which is chiefly used for to dissolve blood congealed, which begins thus. Take *Mummy &c.* to which to stop bleeding, you may add Bole sealed Earth, Dragons blood, Sperma Ceti &c. or the like.

Many other things which are given against bleeding at the Nose and Womb, may be applied here while it lasteth. Which will be most proper when the wounds pierce into the internal Cavities and Bowels.

The Brain of Hens given in Drink, is good against any flux of blood from the Head, saith *Dioscorides.*

They attribute much to Amulets, about the Neck, and held in the Hands, supposing that they stop all sorts of bloody Fluxes. Those that were mentioned in other fluxes of blood, may be here made use of.

CHAP. VI.

Of Excretion, or Voiding of Matter.

The Kinds,

A Purulent or Mattery Excretion, is when liquid Matter made of some other Humor by Suppuration, and turned white is voided, differing according to the Humor, somtimes concocted, somtimes crude, and stinking, and filthy: All these are called Matter. And this is preternatural in respect of the Excretion and of the Matter, and it comes from divers parts. We shall speak of that Excretion of Matter, which is in Spitting, Vomiting, Pissing, and going to the Stool, in those Diseases.

Matter from the Eyes,

Oftentimes there is in the Eye without any other Infirmity, Matter in the Corners, or about the Ball or Sight thereof, and it falls off of it it self. Or it gets at night into the Eye-lidds being shut, and glews them together. Somtimes it is seen in red inflamed Eyes; sometimes it comes from Ulcers there, either white and concocted, or thin and watery, from the Corners of the Eye, or through the Nostrils, smelling strong somtimes. And we have seen it get out under the lower Eye-brows by a Passage there made.

Matter voided from the Ears.

Oftentimes Matter flows from the Ears at certain times, and for a long season, especially when any part adjacent is hurt: Either with pain, or without, as we shewed in the Pains of the Ears.

Matter from the Nose.

In the Disease called *Coryza*, Matter flows from the Nose, especially towards the end, stinking and white, after a thin flux of water.

Or Matter and Snot are voided together in an Ulcer of the Nose: as we there shewed.

And we saw in a Child, a little before he dyed of a consumption, thick matter that flowed like milk out of his Nose. And I saw in my Fathers dayes, the like matter with some of the substance of the Brain, come out of the Nose in two Virgins which had the Falling-sickness from their Birth, it came forth in the fits, and they presently after dyed.

From

Matter from the Yard, Vreters, or Neck, of the Bladder.

From the Yard or Paſſage of Urin in Women, there comes either yellow or white matter, ſomtimes that fouls the linnen: This is accompanied with burning of Urin, pain in the Yard, or Vreters, when Urin is rendered, or it flows without ſenſe, and is leſs troubleſom. This is called an Ulcer in the Yard, or neck of womens Bladders. This Diſeaſe in Men comes from unclean Copulation, and ſomtimes from a venemous Gonorrhæa. This ends ſomtimes in a hollow Ulcer, about the lower part of the Yard and Seam, where it opens in one or divers places, and ſends forth Matter and Urin.

I obſerved in one that when his Yard was ſqueezed, a great deal of matter came forth, which before was mixed with Urin a long time. And after he voided matter at the Yard and Fundament, eſpecially when a Clyſter was given, and he had great pain about the *Os ſacrum* and Rump; but an Inflammation upon each Buttock followed, and Impoſthumes out of which the matter flowed, and not from the other Parts.

To theſe we may refer the Voiding of tough Matter by Urin, and at the Yard without it, or after Urin made, which ſtops the Paſſage, and will not paſs but by degrees and with pain. Sometimes it will not come out without pulling, hanging like a long ſtring. This is joyned with the Ulcer of the Bladder, or the Stone: as ſhall be ſhewed in the Cauſes.

Matter from the Womb. From the openings of the body.

Sometimes it flows from the womb with cutting pain.

Alſo from openings made by a Diſeaſe or Cutting; ſomtimes from Ulcers in the ſuperficies of the Body; otherwhile from deep ulcers. And inward Cavities, ſomtimes more or leſs, and of different Colour; ſomtimes with other filth: as we ſhewed.

The Cauſes.

The Cauſes of al Excretion of Matter from divers parts, are different, as the Excretion is either with, or without an Ulcer.

If it be with an Ulcer, it is from Suppuration of Blood or Fleſh, turned into Matter, after an Impoſthume broken: this is in divers parts of the Body ulcerated.

The ulcer of the Eye, is the cauſe of matter voided.

There may come Matter from an Ulcer in the Eye, and more uſually from that which is in the inward corner of the Eye, from whence it flows, or it fixeth it ſelf in a hollow, and falls into the Noſe, or eats a way through another part. As we ſhewed in Ulcers of the Eyes, and Fiſtula Lacrimalis.

The ulcer of the ears, is the cauſe of matter voided.

There comes Matter from the Ulcer of the Ears. If it be deep, when the Ear is preſſed, the matter comes forth, if it be higher, it flows of it ſelf, and if it get to the drum of the Ear, and eat through, it takes away Hearing. But if it be external, it doth not hurt the Hearing.

The ulcer of the Yard inwardly is the Cauſe of matter from it.

There comes Matter from ulcers in the Noſe, for the Cauſes there mentioned. From the ulcer of the internal Paſſage for Urin and Seed in the Yard, there flows Matter. This ulcer is from ſome greater hurt then that of the Catheter which fetcheth blood; or from venemous Seed, which breeds the Gonorrhæa. Alſo it may come from ſeed not corrupted, but out of its place when it ſtops there, which will cauſe great pain by Irritatino, or Pricking, and Heat: as we ſhewed there, and alſo an Ulcer if it be ſharp.

The Ulcer of the neck of the Bladder, the cauſe of matter without Piſſing.

There comes a Piſſing of Matter from the Ulceration of the neck of the Bladder in both Sexes and ſomtimes it flows without Piſs, eſpecially when it is in the fore part of the Bladder, out of which if it be foul, there will come much matter.

And in the ſame Ulcer of the Neck of the Bladder, the Matter which comes with, and without the Urin, is the Cauſe of the Excretion.

An ulcer in the neck of the Womb, the cauſe of Matter voided.

The Excretion of Matter from the Womb, is cauſed from an Ulcer in the Neck of the Womb. As we ſhewed in the Ulcers of the Womb.

External and internal Ulcers, are the Cauſes of the Excretion of matter by the opened places of the Body.

There is a Voiding of Matter from the external Ulcers, diſperſed by the Superficies of the Body in the skin and fleſh, either made by force external, or opened of themſelves. And from the internal Impoſthumes alſo opened. From whence if the Matter have been long there, it will freely come forth, either ripe or ſtinking, pure or venemous, or mixed with Venom: the Cauſes of all which we ſhewed in Ulcers and Impoſthumes.

When an Empyema is opened, of which we ſpake in its place, there comes forth as much matter from the Cavity of the Breaſt, which came by the Ulceration and Corruption of the Lungs, ſomtimes as will fill divers Baſons.

That Matter which is in the Belly from an Impoſthume in the Liver or Spleen, as we ſhewed, can ſcarſe be diſcharged by opening of the belly. For although matter may be in the belly, from Impoſthumes which broke of their own accord, yet, in regard it is ſeldom known, nor can it be diſcovered by a tumor external, becauſe ſo much cannot be gathered together, you muſt not be raſh in opening a part to let it out. And if matter be gathered within the skull, you muſt be as wary: For it is not to be known certainly that matter is there, and therefore we muſt not open the skull but upon neceſſity, when we know there is matter, becauſe it is dangerous; and Nature (if death prevent not,) will diſcharge it at the Noſe.

There is alſo an Excretion of Matter without an Ulcer, in the Eyes and Noſe, which are alwayes wet, which cauſeth it.

The moiſture of the Eye turned into matter, is the cauſe of the Excretion of matter.

In the Eye when the water is concocted, and made thick.

This comes from the Heat of the Eye-lidds, which dryeth the humor, as we ſee in red Eyes, which goes away when the Heat and Redneſs is gone, which cauſed it. But while they continue, there are alwayes tears, as in Epiphora, and Filth. As we ſhewed in this Diſeaſe of the Eyes.

The moiſture of the Noſe turns into matter.

When ſlimy Flegm ſtayes too long in the Cavities of the Noſe, it cauſeth an Excretion of Matter concocted, as in the end of a Coryza or Poſe.

That Flux of white Matter like Milk out of the Noſe of a Child, came from the Brain, where it was made of blood and flegm; becauſe the brain was affected, ſo that there were continual Convulſions and Death.

The Cure.

The Cure of matter in the Eyes.

If Matter come from the Eyes, and that from an Ulcer, firſt cure the Ulcer. If the Eyes be mattery without an ulcer as in Epiphora, you muſt cure it as was there ſhewed. If it come from too great a Heat of the Eyes, when that ceaſeth, the Matter will ceaſe. If Matter be in the Eye from any Cauſe, and hinder the Sight, it is taken away by gently rubbing the Eye with a fine Clout, to bring it to the corner, that it may get out.

The Cure of filth or matter in the Ears.

We ſhewed in the Ulcers of the Ears how any matter flowing from thence ſhould be cleanſed away.

If the Matter in the Noſe come from

concocted

The Cure of matter from the Nose.

concocted Flegm, in regard it signifieth that the Flux or Coryza ceaseth, it must not be stopped, but rather provoked with Errhines and things mentioned in the Stoppage of the Nose. As also the milk-like Flux which is seldom seen, must not be stopped, though usually death follow. But if the Matter come from an Ulcer in the Nose, the Cure is mentioned there.

The Cure of the ulcer of the yard and the matter that flows from it.

When there is Matter voided at the Yard not with Piss, but by it self, and when there is heat of Urin also, which comes from an Ulcer in the Yard, it is less dangerous then pissing of matter, which comes from an Ulcer in the neck of the Bladder, because the part is less noble. And if it be not old, or lie too deep, it is more easily cured, but more hard when more filthy and deep, then it requires a long Cure, or else it eates through the Perinæum, and lets out the Urin there.

Voiding of Matter from the Ureters in Women without Piss, or with it, because it comes from an Ulcer in the neck of the Bladder, it is as hard to be cured, as pissing of matter.

The Cure of the Ulcer of the Yard, and the Heat of Urin from thence, is as that of the Ulcer in the Neck of the Bladder: And the things to heal the Ulcer, and abate the Heat, are to be used here.

In Women it is cured, as pissing of matter, to which disease I refer you, for both come from an Ulcer in the neck of the Bladder. But if it come from the neck of the womb or an Ulcer there, the Cure was mentioned in the Treatise of those Diseases.

In both Sexes, we give Clysters, to loosen the Belly, there mentioned.

And the Cleansers and Dryers there mentioned, because this Ulcer is near the neck of the bladder, and in the same Passage, so that the medicines good against those Ulcers, must needs be good against the Ulcers in the Yard, if they be used often.

The Decoctions mentioned in the Cure of Ulcers in the neck of the bladder, may be here given to be drunk, because good both against Ulcer and Heat, and also they have Guaicum, and the like which heal Ulcers.

Also the Vulnerary or Wound-drinks, are good here, as in other Ulcers. They are best which are mentioned in the general Cure of Ulcers, as the wines and distilled waters, or the Decoction that begins thus. Take *Comfrey-roots, Fennel &c.*

Juyces, Waters, Milk, and Rosin are here to be used, as in the neck of the bladder.

And the Compound Pouders, and those three Pouders, two whereof are good against heat of Urin and Ulcers, and the third only against Ulcers.

Simple Pouders are of Acrons, Horstayl, perwincle &c.

To asswage pain when violent, the Narcoticks mentioned in Heat of Urin are to be administred alone, or mixed.

Injections into the Yard come sooner and easier into the part affected, then when it is in the neck of the bladder, and therefore are here of more concernment. And those mentioned there, which first cleanse, and then dry and heal; also Milk, Decoctions, Juyces, Waters &c. to which you may add Ægyptiacum, if it be very foul.

For the Ulcer in the Yard, when you must cleanse, make this Injection. Take *Liquorish one ounce and an half, Beans-shales six drams, red Pease one pugil*: boyl them *in Goats Whey, with a little Lye, and Honey of Roses, Sugar, or Turpentine dissolved with Honey, and the Yolk of an Egg.*

Another Injection to heal. Take *Roots of Comfrey one ounce and an half, Horstayl and Plantane, each one handful; Litharge six drams*: boyl them *in Iron-water, and in one pint thereof, dissolve Honey of Roses, or Sugar of Roses two ounces, Turpentine one dram, dissolve it in the Yolk of an Egg*, for an Injection.

Or this: Take *the white Troches of Rhasis half a dram, Lapis Calaminaris, Tutty, burnt Lead, Bole, each a dram, dissolve them with convenient Liquor, or Milk, or Whey.*

Another. Take *Cerus half an ounce, Lytharge two drams, Tutty prepared three drams, Starch one ounce*: make a Pouder, and inject it with Water, or drop it into the Nut or head of the Yard.

A good Water for an Injection. Take *Comfrey roots half a pound, Roots of Snakeweed, Tormentil, each two ounces; ten Heads of Daffodil roots, Horstayl and Plantane, each two handfuls, Tops of St. Johns-wort, with the Flowers two pugils, Allum one ounce, Honey of Roses as much as is sufficient, twelve Eggs beaten*, if the Herbs be dry, sprinkle them with *Plantane-water, and distil them all.*

If you add to these Injections, some Drops of Spirit of Vitriol, or of Salt, they will be stronger. And if these spirits be used alone with Whey, they will cleanse and heal.

The Balsom of Suphur invented by *Roland*, doth cleanse and heal excellently.

These may be dropped into the Yard, if the Ulcer be not too deep; as also Juyces.

They put some Oyntments also, as Pompholygos. with a wax Candle, which is better then other Instruments, because it will bend better in the crooked Passage. But you must remember that you tye it with a thread, least it should get into the Bladder, and the Oyntment go beyond the Ulcer. The distilled Oyl of Henbane dropp'd into the Yard, doth asswage pain.

You must anoint the seam or future between the Stones and the Fundament, and foment it, when there is heat and it will be felt within, and the Passages must be loosned, with Oyntments mentioned in the Ulcer in the Neck of the Bladder, to which add Opium, if the pain be great. Anoint also the part with Oyntments, there mentioned to heal the Ulcer.

And let the Diet be as there mentioned.

The Cure of a Ulcer in the Neck of the Bladder & the slimy Matter.

The Excretion of slimy Matter from the Yard without Urin, and in Women from the Urin-passage, is cured as that of the Stone and Matter, with Injections which cleanse the slimy Matter, and if it stick in the Yard, it must be drawn out. Or if you put the Yard into a hollow Raddish, the matter will be drawn forth.

The Cure of the ulcer in the womb & the matter that flows from it, as also from other parts of the Body.

The Matter which comes from the Womb, is to be cured as the Ulcer of the womb. When it flows by any other Orifices, from any internal filthy Ulcers, which lye deep in the Body, and are made of Imposthumes that break or are opened, you must cleanse and heal: As we shewed in Ulcers, Imposthumes, and Wounds. And we shewed in the Cure of Empyema, how you should order the Matter that flows from the Breast after Incision.

CHAP. VII.

Of Excretion, or Voiding of Water.

The Kinds,

WE call that a watery Excretion, when a moist Humor, thicker or thinner, made of the Excrements of Flegm, or of that which is Natural and crude; and of the Serum or Whey mixed together, so that the one is more then the other flowyeth forth. Which Excretion is preternatural, chiefly when it is much and often, and corrupted, or comes not out at the proper place. This comes from divers parts, besides that of Spitting, Vomiting,

Pissing, and Purging: Of which shall be spoken in their places.

Tears. Tears flow from the Eyes often, which are like Whey, or Serum, or Flegm mixed with water, they break out in found people, especially in Children, and doting old Men, from a small Cause, and in others from a great Passion of Mind. And therefore are not counted preternatural. But when they are troublesom, and of long Continuance, in some Diseases of the Head and Eyes, they are Symptomes of the same. Some Tears are hot and sharp, others cold.

The dropping at the Nose. There is often water from the Nose which is natural, because it is by the right way, but when it aboundeth, it is preternatural. And it is in some from whose Nose, water flows like tears, and a drop hangs at the end of it. Or it is like slimy Flegm which being usual in children, is counted less noisom then in Men.

Coriza or Pose. The same is in the Kind of Defluxion called *Coryza*; there falls at the first a thin moist Humor constantly, actually cold, sometimes hot and sharp, that makes the Nose smart, and provokes Neesing, and causeth Tears, inflamming and corroding the Nostrils and Lips, with great Spitting, Hawking, and Coughing somtimes. And this Humor at the last, is thick, white, or of another Colour.

The same happens in other Diseases of the Head and Defluxions: As was shewed.

Water from the Ears. There comes a water out at the Ears thin, or thick somtimes, but seldom. And a certain Maid had divers measures of water that flowed from her Ear without any other hurt.

The Flux of the womb or the Whites. It is usual in Women to have the white Flux. And because it useth to come when women are past their Courses, they are called the white Terms. But these use to be out of order, and with women that have their Courses, and last more or less time. And somtimes they trouble such as have their Courses stopped: As those who are past them, and are in old Women. In Virgins it is but seldom, and often in women with Child.

Somtimes this Flux is of water, and very much, and clear, and milk, somtimes sharp or salt, yellow, green, or black, somtimes mattery, stinking.

Somtimes it is mixed with Flegm that is tough, without scent, cold and little, or as much or more then the water.

If this Flux be immoderate, there is no other accident, and both Wives and Virgins have it many months and years without hurt. But if it be immoderate, there is an evil Habit of Body therewith: Also Faintness and Weakness, also Barrenness in some, although it hinders not some. If the matter be foul there is an Itching, Pricking, and Heat in the Privities. And it is very noisom when it stinks, and makes the Husband loath her.

Preternatural Sweat. Usually there sweats a whey or water out of the Pores of the skin, it is Natural and common to all Complexions: but it is preternatural, when it is too much or foul, as it is in Diseases, and somtimes without.

There is too much Sweat without a Disease, when it is caused oftner then it should be, or continued longer, so that they faint, and if it be often, they grow faint.

The Sweat is evil when it stinketh. This is somtimes al over the Body, or in the parts, as Feet, as we shewed concerning the Stink of the Feet. Also that which is cold and clammy, not hot, moist and like water, is preternatural: As also that which staineth the shirt with any Colour, or like Saffron.

That Sweat is also counted unseemly, when the Hands and Soles of the Feet are constantly, or for no, or little Cause, wet as is usual with some.

In Diseases, if Sweat be not convenient, or at an unseasonable time, as in Feavers, or too great, as in the English Sweats, it is preternatural, because the Patient is not refreshed thereby, but is worse and weaker. Also it is evil, when the Sweat is not over all the Body, but only in some certain places. And if it be cold and tough, but when it stinks, if it be beneficial, it is not evil: as we shewed in Feavers and other Diseases.

The Voiding of Water at other Parts opened. In the Dropsie Ascites when the Belly is opened, there is great store of Water, and if the Thighs be opened, it drops and continueth long. Also in the Water-rupture it flows freely from the Codd being opened, and out of the Bladder, Pustles, and watery Tumors. Also there flowes a watery Humor from Ulcers; as we shewed in Ulcers.

The Causes.

This watery Humor which flows at the Eyes, Ears, Nose, Womb, Pores, and other openings, comes from the Brain, or from other parts of the Body.

A watery humor from the brain, is the Cause of tears. It is plain that Tears come from a Defluxion of Water from the Brain, because they are somtimes without sharpness, and heat, like water, but somwhat clammy. As Flegm somtimes thin and clear, as whey, somtimes sharp, salt, cholerick and hot. And that these Humors flow from the Brain is plain, because Tears break forth so speedily, and in such plenty. For though that Moisture with which the Eyes are moistned for their better Motion, come from the Serum which sweats through the Veins of the Eyes; yet those little Veins cannot contain so much as will make Tears to flow. This Defluxion of water into the Eyes to make tears is more easie, because there is an usual Passage to the Nose, by which it is evacuated Naturally, by a private Hole at the Roots of the Eyes, and another in the inward Corner of the Eye. By which means upon the least Motion, the Eye is filled with tears. Also an Excrement of Flegm and Water, gathered in the brain, as we shewed, may flow forth divers wayes, and so it may descend into the Nose and Eyes. We cannot grant that the tears should flow by an internal or external Veins, as some have supposed; because the Veins carry Blood, and not Flegm, and the water cannot be quickly separated from the blood, but we say it comes from the Brain by Passages ordained therefore. And if by Chance such excrementitious humors should flow to the Eyes from without the Skull, we suppose it would rather lye under the skin and Eye-lidds swell them, then make many tears.

And the reason why this Flegm and whey is carried into the Eyes and causeth tears, which in found people are fleginatick, in sick more watery, which are of long Continuance, is the abundance of those excrementitious humors in the Head, by which means they flow into the Nose, and also into the Eyes, keeping them alwayes wet and full; and the rather, when the Eye is made fit to receive it by being often watered, or is weak, and loose from some Disease. And these Kinds of Tears do no wayes inconvenience, but by their Moisture, especially when they come from a flegmatick Humor. But if they come from abundance of water, being salt, sharp or hot, with Itching, or redness of the Eye-brows, mentioned in Epiphora, they are troublesom.

Also from an Ulcer of the inward Corner, or the Eye, when the little flesh that grows there is consumed, and the Hole enlarged, by which the Moisture of the Eye falls upon the Nose, or from a Fistula there, when it falls into the Nose, and fills the Eyes, and causeth a continual weeping. As we shewed in Epiphora, or Rhewm of the Eyes, and *fistula lacrymalis*.

The expulsive Faculty being stirr'd up by the provoking of the Eye, or the parts adjacent, driving the Humors suddenly into the Eyes, causeth tears, though not of long Continuance. As the Sun-shine, Smoak, any sharp Fume, as o fOnions, or Mustard, and the like, or things fallen in-

to

to the Eyes cause Tears. Also the pain of any part near, as the Tooth-ach.

Tears usually break forth from a violent motion of the Humors by straining; or from a disturbance of the mind, in which, by reason of that wonderful Convulsion of the Muscles, Cheeks, Lips and Eyes, which we observe to go before tears in crying: these watery Humors near the eyes being moved, insinuate themselves into the Eyes, and cause tears. As we may observe tears to fall from violent laughtre, when the Mouth is strained with too much Joy. Also we may observe that tears will fall in other strainings or forcings, as at stool, or in Child-birth, with Coughing or Sneesing.

A moist Humor comming to the Nose from the brain, is the cause of dropping and Coryza or Pose.

VVhen a moist Humor falls from the Brain into the Nostrils that are ordained for the discharge thereof, it causeth the dropping of the Nose. In which the Flux is greater, by how much it aboundeth in the Brain. And there fals a thin Humor like water, if it comes directly from the Brain, because it is generally that of the Brain, and if it be kept long in the Cavities, it quickly grows thick and clammy. Also there is a serous Humor in the Brain which is an Excrement as we shewed in other Desluxions mixed with Flegm, and flows to the Nose, and either causeth or increaseth this Flux, and then it is thinner, sharper, and hotter, and causeth Itching and Sneesing, and that which is called *Coriza* or Pose. The Collection of Humors in the Brain causeth this Desluxion: And these things that stir up the expulsive Faculty, do increase it. As we shewed in other Diseases from Desluxions, especially in the Cough.

A watery humor comming from the Veins, is the cause of the moist Flux of the Ears.

That water which flows out at the Ears comes from other parts besides the Brain; for it cannot come to the place of hearing any way, but by the hole in the hearing Nerve, and if it should enter by that, it can only come into the internal seat of hearing, and cannot pass to the external, except it pierce through the Tympane, which it cannot do without hurting of it, and loss of hearing. But when this Flux is without the loss of hearing, and comes externally, it is plain that the water was carryed to the outward Passage of the Ear, into which the serous Matter sweating through doth moisten; and when it is too much, it comes from the Veins there about, and causeth this Flux: this is seldom, because there are better Passages for it; and but sometimes, especially when the Passages are loosned. As we shall shew in the Whites, that water and flegm comes from the Veins.

A moist Humor coming from the Veins to the neck of the Womb, is the Cause of the Whites.

As we shewed that the Terms come from the veins of the neck of the womb, so the Whites come from the same; and not from the Cavity of the womb, as some dream, because that is so narrow, that it cannot hold such a quantity as usually floweth, neither can it be contained therein, or pass through the veins which are small, and are not enlarged till the woman be with Child; as it may through the Veins of the neck of womb which are larger. And this is, when this excrementitious Humor is mixed with blood, or with the terms, which makes it ill-coloured; or after the terms are gone, when it presseth by the same wayes they did, for which Cause it is called the white Terms. And this may be at other times, when Nature is burdened, both in such as have, or such as are past their Courses. As it is sometimes in women with Child: In whom in regard the inward Orifice of the womb is closed it cannot flow from the cavity of the womb, but from the neck; and in them who are not with Child it is the same. Nor is it a wonder, that nature should purge these Excrements by the same way that blood is evacuated, because she doth the like in other Vessels ordained for other Evacuations. And the reason why they are white, and without Blood is, because Nature dischargeth them at that time, when there is no blood to be sent forth. As also because Nature separates the blood from the Impurity, and keeps it, and sends out the Excrements as noxious. Which Excrements, if serous or watery, come from the whey, if fleginatick, from crude blood, if mattery from blood stained. And if other Humors be mixed, as yellow, green, or black Choller, it is discoloured therewith. And if they be sharp, or the whey salt, then by pricking, and burning in the Parts to which it sticketh, it causeth Itching, and sense of Heat; and if it continue long, ulcerateth. But when it is alone, it flows without sense, like water, or the white of an Egg beaten, nor is it then noxious, except it be immoderate.

The Cause of these Excrements in the Blood which feed this Flux, is that which is eaten or taken in, and the weakness of Concoction, and of those Bowels which separate the Excrements, as in a Cachexy, of which we spake sufficiently. These Excrements are sent forth by nature when she is burdened, and the sooner if there be weakness of the womb, as may be from divers Causes, and also from this Moisture which wets and cools the Part. As also when Nature is stirred up to expel them by other means. As we have known women who never had the whites before after they have taken a Purge, which stirred up Nature have had them. And many have had the same by sitting long in a Bath, not from Infection, as they have thought from other that were in at the same time. But Nature throwing out Excrements by bathing, doth cause the whites which are too thick to be sweated forth.

Serous Matter getting through the Pores, is the Cause of Sweat,

That water which is swet forth through the whol Body, is serous; and mixed with blood, gets into the Superficies of the Body, by an obscure solution of contiguity of the skin, it goes through the Veins.

This Solution of Contiguity comes from the opening of the Pores, or Anastomosis, or Rarefaction of the Skin, or Diapedesis: For then the Serum being very thin, passeth through the Pores of the skin, and causeth Sweat, being either drawn, or driven thither.

Serum or water is attracted by Heat external, for then that with the Blood is snatched to the superficies of the body, and goes through the skin, as water is distilled from Plants, as I shewed. And the rather, when the water is made thin and hot, that it may pierce. And if there be plenty, or if it be thin, sharp, or cholerick, it will be more easily drawn out by the heat. And as Heat doth cause a Natural sweat, so if it be vehement or long it is preternatural. This Heat is from Exercise or Baths, dry and moist, and the immoderate use of these causeth immoderate Sweats. Therefore Baths are said to weaken.

In Diseases, as Feavers, though the whol Body burn, yet it scarce sweats, till Nature expells the Cause thereof by sweat, which is in intermitting Feavers when the heat ceaseth in the day of rest, and in continual Feavers, when they decline. For when the Body is hot, and Nature is busie in the Concoction of the Cause of the Disease, it cannot be sent forth by sweat, but when it is prepared, and made thin it may.

Nature drives water to the Superficies of the Body, where it is burdened therewith, and then the expulsive Faculty labours to cast it out by sweat.

Nature is burdened, when the quantity or quality of the Serum is offensive; when it is too much in the Veins for want of Evacuation by Urin; then when it cannot be purged from the blood, otherwayes it is sent forth, or drawn forth by sweat. Therefore they which pis little, sweat much, especially they that use moist Diet, and drink much.

If it be offensive in quantity, and be impure by mixture of other Humors, and so burdensom to Nature, it is sent forth by sweat as well as urin. In Cacochymicks or Bodies of evil Juyce, Sweats are not Natural, but are stinking or clammy, and somtimes discoloured; now all owes

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the Body, and sometimes in some places only; wherefore some sweat in their Hands and Feet, and are filthy: as we shall shew in Filth. All these Sweats are evil, and forerunners of Diseases.

If the Cause of a Disease be in the Blood, part whereof is Serum; as in Feavers, Nature if she can find no other way, as the Urin sends it forth by sweat. And this if it comes kindly is healthful, though it stink and be discoloured. But if it be immoderate, or not sufficient, or at an unconvenient time, when Nature is not prepared for Expulsion, it is evil and unprofitable. This is usual in Contagious Diseases, Nature oftentimes sends forth the evil Quality with the Whey with Sweat, which is sometimes healthful, and sometimes deadly. And if it come when Natural Heat begins to be extinguished, and the Body is outwardly cold, then a cold sweat will appear. All which we have mentioned in such Diseases.

Also when Nature is moved by Passion, and drives the Spirits inward or outward, there will be sweat, which will presently be cold, if the heat go in, as in a swounding, and in the pangs of Death.

Moisture getting into the openings of the skin, is the Cause of the flux.

There follows a Flux of moisture from solution of continuity in any part of the Body; and if the skin be only scratched, the water is little, as in Scarification, Incision, Burning, in Water-pusles, or Hydropick Leggs: but if the Orifice be large, by cutting, pricking, tapping in a Dropsie, or when water is taken out of the Codd, or from watery Tumors. Or when it comes from an Ulcer, it is larger.

The Cure.

The Cure of Tears.

Some Tears are to be cured, some not. For if they come from a Cause that continueth not, as Passion of Mind, or be provoked by Brightness, Scents, Smoak, and the like, they will be gone, when they are removed. And these are to be avoided that are subject to Tears. But those Tears that come from a lasting Cause which returns, require Cure. And if they are joyned with Redness, Heat, and Itching, as in Epiphora or Flux of the Eyes, and come from thence, it is cured as that is. Also if tears be with an ulcer of the Eye or Lachrymal Fistula, and come from thence, they must be first cured before the tears will cease. And in regard these Diseases of the Eye are hard to be cured, the tears from them are hard to be cured also. Except it happen as sometimes it did in the Cure of a Lachrymal Fistula, that it grows so big, or there be so great a hole from the eating away of the bone of the internal corner of the Eye, that all the water falls no longer by the Eye, but from the Nose.

If often, or constant tears be without the Diseases mentioned, by reason of water flowing not by usual Passages, but into the Eyes, it must be cured. Thus the Humors that abound in the Head must be purged, and they are to be hindered in their Passage, and the Flux sent from the Eyes to another Passage, and stopped, the tears consumed, and the Eyes strengthened.

Thus you must purge by stool, by mastication, or chewing, by sneesing, for though sneesing cause tears, yet because it sends them to the Nostrils, it doth good: such as are prescribed in Defluxions, and the Pain they cause, in the Cough, Ophthalmy, or Inflammation of the Eyes, and in Weakness of Sight.

Sweating often doth chiefly take away those Moistures from the Head and whol Body, which may be done by the Decoction of Guaicum, and other Sudorificks long continued, because Baths are not so good for the Eyes: As we shewed in Defluxions.

We hinder the increase of these Humors by a wholsom, slender Diet, by applying and giving things to the Head that dry and strengthen, and by Fumigations, mentioned there.

We divert or turn away these from the Eyes by Cupping-glasses, Frictions, and other things that revel and derive: And last of all use Caustick and Vesicatories to the Neck behind, and to the Shoulders. And use actual and potential Cauteries to those parts, or to the Crown of the Head.

Every day after he hath combed his Head, let him rub his Neck with a rough Cloth, this is good against all Defluxions.

Apply Dryers and Binders to the Fore-head and Temples, to hinder the comming down of the Humor, especially the Emplaster, mentioned in the cure of a salt rheum in the Eyes.

At Bed-time, use things to the Eyes at their corners, that they may be better kept in, with Cotton, or Spunge, the Patient sleeping upon his back; or Oyntments, or Pouders, or Fumigations.

Those are prescribed in Epiphora, and in the Cure of the Ulcer of the Eyes, as that Pouder in Epiphora which begins thus. Take *Cadmia, or Bvdis, Ore &c.* Or thus: Take *Antimony prepared, or that of Blood-stone, Smoak of Frankincense, &c. and that of Sals, and the Collyria or Eye-medicines made of white Vitriol, and the strong astringent Pouder there mentioned.*

And the Oyntments mentioned for the Ulcers of the Eyes, both white, red and black, and that with Sarcocol, &c. And the three Collyriums of Rhasis, called Eleiser, of Lead, and Polycreston, leaving out the Opium in the two last.

Besides these you may add some drying Waters, as of Myrtle, Honey-Suckles, Sumach, Agrimony, Priver leaves, wild Vine, Osiers; or of sharp Fruits, Pomegranates, and Sloes distilled.

The Decoction of the same is good, chiefly of Pomegranates, and *Dioscorides* commends the Decoction of plain Tree leaves.

He also commends Buck-wheat, and dryed Flower.

Also the Pouder of Ebeny.

This is an excellent Oyntment to put into the corner of the Eyes. Take *the Juyce of sour Pomegranates, or of Bramble tops, or Roses* as much as you please, boyl it to the consumption of half, mix it *with Pouder of burnt Myrobalans, sour Grapes,* and add *a little of that Juyce which is taken from a Blood-stone, or a Hone, such as Barbers set Rayzors with, being rubb'd with another Whet-stone, and convenient Liquor. And other drying Pouders.*

Burnt Vitriol with Sugar dissolved in Water is excellent.

The Cure of the dropping at the Nose.

In regard the dropping at the Nose and Snot, is an Excrement of the Brain, you must rather prevent the increase of the Humor then stop it.

The Cure of the Coryza or Pose.

In the Coryza or Pose, water flows from the Nose abundantly, and the Nostrils are offended, and the Parts adiacent, which brings also a Cough. You must purge the Excrements of the Brain and the Defluxion, as there mentioned; Not neglecting the Nostrils which are sore, but using things against Inflammations and Ulcers.

The Cure of matter from the Ears.

If a Water-flux from the Ears be little, and do no other hurt, you need do nothing but take away the Humor in general, and if it be large, use things that hinder the increase of the Humor, and purge it with water-purgers and Diureticks that is by urin; of which there are divers in the Cure of the Dropsie Ascites. If it be thick Snot, and flows not so readily as the other, you must use Cleansers: such as are used to purge the Ears, there mentioned.

The Whites, although women have them without hurt a long time; yet at length it makes them discoloured, and slothful, and unfit to conceive, and distastful to Men, for which Cause they desire much to be cured: which is difficult when it is old, and scarce absolutely to be done so, but it will return. And if the Whites be malignant, then besides the Filthiness and Stink, there are hurts in the neck

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of the womb to the bottom and ulcers: And sometimes other Diseases are caused by the too great Evacuation.

The way of Cure is, to hinder the Bleeding of these Humors in relaxation to the Stomach, and so fetch them out of the Body, and consume them, and to draw them, and turn them from the womb, and to dry and strengthen the Part. But if other Diseases be joyned therewith, that came before, or after it, as Cachexy, Dropsie, then you first must look to them; and those parts that are ordained for Concoction, and are faulty, must be amended. If barrenness follows, and the woman be troubled therewith, you must aim at both in the Cure: And if Conception be hindered by moistness or plenty of Excrements, you may use the Course mentioned in the Cure of Barrenness. But for the Whites alone, you must use things to evacuate and to alter as follow.

There are divers Evacuations to purge these Excrements from the whol Body, as Blood-letting, Purging, Vomiting, and Sweating.

Blood-letting is good in full bodies, because some of the Excrements are taken away thereby, either at a Vein or with Scarification: As also by provoking the terms is stopped, because thereby the Excrements that cause the Whites are totally taken away or in part.

First we must purge, and the more by how much the greater the Flux is: and we must regard the Constitutions and purge with things proper for the humor abounding, alwaies using those Purgers which have an astringent quality, as in other Fluxes.

In moist bodies, in whom this Flux is most ordinary, we prepare before purging; first we give a Clyster or a Laxative, then we give these following three, four, or five daies.

As this Julep. Take *Honey of Roses, Syrup of Hyssop, each two ounces; Syrup of Stœchas, Mugwort, each one ounce; Water of Balm, Betony, Nep, Penny-royal, Sage twice as much as the Syrups*: mix them *with a little Cinnamon, or Diamoschum, or Diambra.*

Or this Decoction. Take *Orris roots one ounce and an half, Madder, or Valerian one ounce, Cypress roots, Elicampane, each half an ounce; Betony, Nep, Balm, Mugwort, or the like, three or four handfuls, Rosemary tops, Lavender, Wall-flowers, red Roses, each one pugil; the great hot Seeds two drams, the lesser hot Seeds one dram, Pease one pugil*: boyl them *in Waters, and with Sugar, and Honey, and Cinnamon, mix them for four or five doses.*

Purge afterwards thus. Take *of the Decoction mentioned as much as will serve for once*, add *Carthamus seeds, and Senna each half an ounce*; boyl them, and infuse *two drams of Agarick well mixed with Honey of Roses*: make a Potion.

Or give Diaphœnicon, Diacarthamum, de Citro solutivo alone, or dissolved with the Decoction, or preparing Waters, or Pills of Agarick, Cochy, Fœtidæ.

You must purge often, gently, as with Pills of Hiera, Mastick, Assaiereth, Alephangine, or with the stronger mentioned, among which the preparative Decoction increasing the quantity thrice, and adding *Agarick five drams, Turbith three drams, Ginger half a dram* may be given ordinarily: Or you may infuse them all in Wine, with a little Wormwood.

Things good to prepare and purge Flegm, as in Defluxions, are good also here.

When the body is corrupted, and the humor malignant and evil coloured. Prepare thus,

A Julep. Take *Honey of Roses two ounces, Syrup of Betony, Endive, Fumitory or Hops, each one ounce; Wormwood, Maiden-hair, Bugloss, and Fennel-water twice or thrice as much as the Syrups, take it often.*

Or with this Decoction. Take *Liquoriss one ounce and an half, Succory, Fennel, Dandelion, Elder, and Danwort barks, each an ounce; Endive, Succory, Bugloss, Fumitory, Hops, Betony, each one handful; Cordial Flowers, and Broom-flowers, each one pugil; the four great cold Seeds half an ounce, Fennel, and Anise-seed, each two drams, Dodder seed one dram*: make a Decoction, strain it, and sweeten it with sugar, Cinnamon, and Diarrhodon.

Purge thus: Take *of the preparing Decoction, as much as will serve*, add *Senna half an ounce, yellow Myrobalans one dram and an half*; boyl them, infuse *Rhubarb one dram, Syrup of Roses one ounce and an half, or Juyce of Roses one ounce*: make a Potion.

Or with the Potions mentioned in the Flux of the terms beginning thus. Take *Tamarinds, Prunes &c.* Or, Take *yellow Myrobalans &c.*

Or give the Electuary of the Juyce of Roses, Diasenna, Confection Hamech, dissolve it with the aforesaid Decoction or Waters, or Goats whey; or give aggregative Pills.

When we will purge often, we give gentle medicines, Catholicon, Diasebesten, Tryphera Persica, or Syrup of Roses, or the Infusion of Senna, Rhubarb, Agarick, or of Fumitory, or Epithymum, or stronger mentioned.

Or this Apozem. Take *the Decoction mentioned to prepare*, add *Raisons ten pair, Prunes six, Tamarinds one ounce, Polypody two ounces, Senna three ounces, Epithymum two drams, Myrobalans yellow, Chebs and Indian, each two drams*; boyl them in water, and infuse the *straining Rhubarb three drams, Spike one scruple*, strain them, add *Sugar to sweeten it.*

You may use many Preparatives and Purges, mentioned in Cachochymy, and the like Diseases, as Cachexy and Dropsie, when the Body is inclined thereunto.

A Vomit makes a great and sudden Evacuation, and is good here. When the body can endure it afore meat; or after, meat when they are weak. And this draws the humors upwards.

Diaphoreticks are either insensible by transpiration, or sensible by Sweat, and they are good in flegmatick bodies, when the Diseases are old.

Also Exercise to provoke Sweat, is good.

And to lay on Cloaths to provoke Sweat.

But a hot House is best, because it is stronger, especially if it be heated with the Decoction of things that provoke Sweat: As Chamomil flowers, Melilot, and other sweet Herbs, of which we shall shew how to make moist Baths, in which they may sit. And which also do provoke Sweat.

Fumigations also for the whol Body. And Oyntments for the Back-bone; these do not only sweat, but dry the body, and consume the humidity. Among which is that of Cinnabar for the Pox. But here we use but a little with other things, least the Jawes should be infected, and it is good when the Disease is desperate.

Also you may give things to drink, that provoke Sweat. And continue them for some weaks, when the Disease is old, with a spare Diet. And this is to be done by the decoction of Guaicum and Sarsa, as in the French Pox.

You may give Alteratives to dry and consume the Humidity if it be very watery, with Astringents if it be immoderate; such as are mentioned in the Cure of the overflowing of the Terms, which stop them, and may also these. But because the filth is purged by these, and not profitable blood, as in the Courses, and the body is not so much or so soon weakned by these, they are not so suddenly to be stopped, therefore let the medicines be rather drying then binding, and warm to comfort the womb: They are thus made.

Pouders are best alone with red wine, or fleeled wine, or the like, or with Sugar in tablets.

The first Pouder. Take *burnt Harts horn two drams, Ivory one dram, red Coral burnt one dram and an half*: make a Pouder.

Another. Take *Amber two drams, Frankincense, or Mastick one dram, Gum Arabick, or Traganth half a dram*, make a Pouder.

A third Pouder. Take *Date-stones burnt two drams, four Pomegranate kernels, or Rose-seeds one dram, the inward down of Chesnuts, or Hazel-nuts half a dram.*

The fourth Pouder. Take *burnt Cork two drams, Grains*

of Sumach one dram, Acacia, or Hypocistis half a dram.

The fifth. Take *dryed Berbery seeds, of the two low Bramble-berries, Raſ-berries, or Mulberries, Myrtles, each one dram, Agnus Caſtus seeds half a dram*: make a Pouder.

The ſixth. Take *Comfrey leaves two drams, Ladies-mantle, or Yarrow one dram, Mints half a dram*: make a Pouder.

To any of theſe you may add half a dram of the following Pouder which is pleaſant. Take *Cypreſs roots, and Galangal, each one dram and an half; dryed Citron peels, Cinnamon, each one dram; Aniſe-ſeeds* (which *Dioſcorides* commends) *one dram and an half, Coriander ſeed parched one dram, Spike one ſcruple.*

Or, Take *as much Aromaticum Roſatum, Diagalanga, or other Dryers.*

Of theſe you may compound others. Others are of the Roots of Avens, Fullers thiſtle, Mead ſweet, Oak leaves, Brambles, Sumach, wild Tanſey, Lungwort, Adders-tongue, Moonwort, Roſemary, Flower gentle, Millium, Roſes, Piony ſeeds; alſo Aſhes of Cray-fiſh, Shell-fiſh, Spunge.

If you muſt bind more, you may add ſome of this Pouder following to the former. Take *Galls, or Pomegranate-peels one dram, Pomegranate flowers half a dram, Bole, or the like one dram, Bloodſtone half a dram, Acacia, or Dragons blood half a ſcruple.* Or uſe the Aſtringents, mentioned in other Fluxes.

You may make Decoctions of the ſame Plants, or you may make Wine in the Infuſion of them dry.

You may alſo uſe the Juyces of the ſame, alone, or with other Drinks.

You may make Syrups of the ſame, or give ſome aſtringent uſual Syrups, mentioned in the Terms, as of Mugwort, Stœchas, &c,

Drink Waters of Plantane, Oak budds, wild Tanſey, Yarrow, Ladies-mantle, Roſes, Water-lillies, Mints, Service-berries.

Conſerve of old Roſes, Pomegranate flowers, Acorus, Roſemary flowers, Stœchas, candied Citrons.

You may make Electuaries of the ſame, with Pouders and Conſerves, and give Waters to drink after them.

Pills of Bdellium are good here, as in other Fluxes.

Cymbalaria, or that wall herb which is like Ivy, is good in Sallets, and Bee-nettle.

The Chymicks cry up the Vitriol of Iron for a great ſecret, and give every night one grain thereof at bed-time for a month, in Plantane-water, or red Wine, and make Pills of Magiſtery of Coral and the ſame.

Many things are applied outward, which dry up the humors, and being aſtringent, do fix the Veſſels about, which conveigh the humor, and ſtrengthen the womb.

The uſe of Natural Baths for many daies, or weeks after purging often, and good Diet, with drying and ſweating, is good; therefore women that have the Whites, and are barren, do much uſe them. All Dryers are good, as in Sterility or Barrenneſs, Allum, Niter, Salt, actually hot by Nature or Art. Alſo the Sulphur Baths, by uſe whereof women as I ſhewed had the Whites, and were cured by the ſame.

Artificial Baths to ſit in, do the ſame, uſed long or often, as we ſhewed in Barrenneſs: Of Salt, Allum, Sulphur, boyled in Rain-water, till the water taſt of them, adding Vitriol to bind, or Ruſt of Iron.

Or you may uſe Iron-waters, with burnt Plaiſter of Paris to make it dry more.

Baths of Plants, decocted in the Waters mentioned, or with Iron-water, or Bean-water, or Lye, or red Wine, with Snakeweed roots, Docks, Madder, Valerian, Cypreſs, Perwincle, Mugwort, Betrony, Tamariſk, Savine, Ivy.

If you will bind more, uſe Galls, Acorn-cupps, Pomegranate peels, Cork, Sumach, Roſes, Pomegranate flowers, Oak moſs, Myrtle-berries, and the like. In cold women, add the hot ſweet Plants, as Penny-royal, Organ, Calamints, Mints, Balm, Sage, Nep, Marjoram, Roſemary, the great and leſs hot Seeds, Rue, and Agnus Caſtus. To which Decoction add Earths that are dry and ſalt or Bole, or Blood-ſtone, and then they will aſtringe more.

You may uſe Fomentations inſtead of baths, or bags to be ſitten upon hot, full of the ſaid Herbs, wild Rocket boyled in wine, is the beſt. It is good to put in ſome ſweet plants to take away the ſtink of the excrements, chiefly Bay leaves, and Myrtles, Angelica roots, Coriander-ſeeds, Cloves and the like, Vinegar of Roſes, Elder flowers, or the like.

Oyntments and Plaiſters applied to the Privities, Reins, and Loyns, ſtop this Flux, as well as that of the terms: and the Oyls there mentioned, eſpecially of Henbane. To which you may add hot things, becauſe the humor is watery, and ſome of the pouder for a Peſſary. Gallia Moſchata, Musk, & Ambergreece, yet the ſcent wil be loſt with other things.

Many things are put into the neck of the womb to dry, and aſtringe the looſe Orifices, and ſtay the Flux, and ſtrengthen the Part.

Some Herbs are put in ſtamped, Perwincle, Yarrow, Tamariſk, and the like, alſo Aſarum roots which cleanſeth, and takes away the ſtink.

A drying Peſſary is thus made. Take *Galls, or Acorn-cupps three drams, Cypreſs-nuts two drams, Pomegranate flowers one dram, Frankincenſe one dram and an half, Aſhes of Tamariſk one dram, Savine, or Mugwort half a dram, Goats dung, or Aſhes dryed one dram, with Juyce of Shepheards-purſe, and the White of an Egg, and fill a bag for a Peſſary.*

To take away the evil Scent. Take *Cypreſs roots two drams, Marjoram, Mints, Penny-royal in Pouder, each one dram; Schœnanth, Spike, each half a dram; Cloves one dram*: make a Pouder to be uſed alone, or with the aforeſaid, you may add Sanders, and wood Aloes.

Gallia Moſchata, Musk, and Ambergreece will make a better Scent.

You may uſe cleanſing Injections, ſuch as are mentioned in the Ulcer of the Womb, and theſe following.

You muſt make drying and aſtringent Injections of the Decoction that dryes and heal the Ulcer of the womb, or of the Baths and Fomentations, which we uſe outwardly. And if there be a ſtink, let them be qualified as afore.

Fumes pierce beſt into the womb, they dry, bind, and ſtrengthen, and refreſh the womb by their Scent.

Theſe are made of the Decoction of Plants, mentioned for a Bath hot, and taken in with a Funnel, or under the Cloaths.

Or you may caſt Pouders, or the Troches, mentioned in Barrenneſs, upon Coales, Or thus: Take *Maſtick two drams, Frankincenſe, Labdanum, each one dram; Amber, Hypociſtis, Storax, Benzoin, each half a dram; with Bdellium*, make a Pouder.

Keep a good Diet. Let the Air be dry, and avoid cold and moiſture. Eat little, and that which is of a good Juyce and breeds little ſuperfluous Moiſture. Let the Drink be little, rather wine then water. Avoid idleneſs and too long ſleep.

The Cure of preternatural Sweat.

Evil Sweats that ſtinke, are clammy, or ſtain Linnen, becauſe they purge Excrements from ſound and ſick muſt not be ſtopped, but rather furthered. And you muſt cure it by taking away the Cauſe of the abundance of Excrements, and prevent thoſe Diſeaſes which ſweating forerunneth. And if this Sweating be in a Diſeaſe, and the Diſeaſe not cured thereby, you muſt uſe all diligence to take away the remainder of the Cauſe of the Diſeaſe.

There is nothing peculiar for cold Sweats, for in Diſeaſes they are deadly. If they come from fainting, they ceaſe when the Patient comes to himſelf. If Heat cauſeth ſweating with faintneſs, that muſt be allayed. If the abundance of Moiſture that muſt be diminiſhed. If Sweats in Diſeaſes be ſuperfluous and unprofitable, and cannot be well ſtopped without weakneſs: though Nature endeavors to diſcharge her ſelf thereby, yet being ſo great that the Patient may ſooner die then the Diſeaſe be diſcharged, they muſt be ſtopped.

We

We open a Vein when there is fulneſs, and the Body ſweats too much, that with the blood ſome water may alſo come forth.

Alſo by purging water, or ſuch humors as make it too fluid. Alſo in Diſeaſes, if the Sweat be too much, and neither cures nor abates the Diſeaſe, we are thereby admoniſhed to purge again often.

Forcing of ſweat doth ſomtimes cure ſweat that comes of it ſelf, as often bathing, or hot Houſes, which taketh away the Matter.

We give Drinks to thicken the water, to cool and aſtringe, and ſo hinder Sweat. As we ſhewed in immoderate Piſſing, that they would ſtop it, which are proper here, if we mix Reſtauratives when there is weakneſs, alſo the Diet there mentioned is proper here.

Provoking of Urin doth hinder ſweating, by diverting and evacuating it.

Alſo Syrups, Decoctions, Waters, Conſerves, Mucilages, Pouders there mentioned, with Cordials, as Diamargariton frigidum.

Outwardly apply things to repel the Flux of water, and that bind the skin, and ſtop the Pores, by degrees.

Anoint the Back and other parts, with Oyl of Willow-leaves, or of Myrtles, Roſes, Quinces.

Or, Take *Oyl of Willows three ounces, Myrtles two ounces, Juyce of Houſleek, or Nightſhade, Vinegar, each one ounce and an half*; boyl them till the Juyces be conſumed.

To this you may add things to cloſe the Pores, *as of Mucilage, of Fleabane, or Quinces, one ounce and an half, Infuſion of Gum Arabick, or Traganth in Roſe-water one ounce, one White of an Egg, and Wax.*

Or, Take *Maſtick two drams, red Sanders one dram, red Roſes, Pomegranate flowers, Myrtle leaves or Berries, each half a dram; with this Oyl mentioned* make *a Liniment, or with Wax an Oynment.* Dioſcorides adds *Sulphur, Gypſum, and the Stone Morochthus.*

Smoak the Linnen with Frankincenſe, Maſtick, Gum of Juniper, Roſes, and Pomegranate flowers, to dry the Body.

The Smell of Camphire in Roſe-water is commended.

Actually cold things cloſe the Pores, if they touch the skin, theſe are to be uſed by degrees, not ſuddenly.

Cold Air is the beſt, by opening windows, and caſting off Cloaths, or by ſprinkling cold water in the Chamber, Vinegar, or cool Herbs.

Sprinkle the Face with water and vinegar, it is excellent.

Apply cold things to the Heart and Pulſes, being cordial.

Let the Air be free, and not hot, and the Garments thin. Let Baths be avoided, the Exerciſe moderate. Let ſleep be little, if the Sweat be moſt then.

The Cure of a watery Flux from a Tumor opened, or an Ulcer.

That Flux of water which comes from the tapping for the Dropſie in the Belly, or from other pricks or cuts, or burnings in the Water-rupture, or in Puſtules, or watery Tumors, or Ulcers is cured: As we ſhewed in Tumors and Swellings.

CHAP. VIII.

Of Spitting.

The Kinds,

SPitting by which Spittle is ſent out of the Mouth, with Hawking, and ſomtimes Coughing is preternatural, chiefly when it is much and filthy; becauſe other humors are alſo ſpet forth, it differs, and is either of Flegm, or Blood, or Matter.

Spitting of Flegm.

There is a Spitting of flegm or water more often then is fit, in found Men, ſo that ſome ſpit when they are ſpeaking at every full point. This is not commendable in Orators, except it be ſeldom, and after a long Sentence.

Ptyaliſmus.

In ſome Diſeaſes, as Catarrhs, and Moiſtneſs of Stomack, there is the ſame continual Spitting called *Ptyaliſmus.*

That great Spitting which comes from Medicines for Salivation or Head-purgers, cannot be counted preternatural, becauſe it is good for Health; nor that which comes from Quick-ſilver in the Pox, becauſe it conduceth to the Cure.

Flegmatick old Men uſe to ſpit Flegm with more difficulty. This is either hawked out of the Paſſage of the noſtrils, or Jawes, or coughed from the Breaſt. In flegmatick Diſeaſes that cauſe a Cough, this Spetting of Flegm comes often. In which it is ſomtimes thin, ſomtimes thick and mattery with ſcent, and without ſomtimes, ſomtimes with more eaſe, ſomtimes harder fetcht up: As we ſhewed in the Cough.

Spitting of Blood.

There is ſomtimes a Spetting of Blood without a Cough or Pain, in which the Spittle is onely bloody which defiles the Meat, ſomtimes pure, thin, or thick, with a bleeding at the Noſe, going before, or with it. Somtimes it is with pain, or hurt about the Jawes, Tongue, Palate, Gums: as ſhall be ſhewed.

Blood is coughed out at the Mouth, either alone, or with ſpittle like matter, in a Pleuriſie, or Impoſthume of the Lungs, with a pricking of the ſide, and a Feaver, as we ſhewed in the Pain of the Breaſt.

Spitting of Blood.

Pure Blood is ſometimes ſpet out at the Mouth with a Cough, ſomtimes more plentifully then others, and at a certain time, at a diſtance. A Conſumption follows this if it continue.

We have known divers women that have without hurt coughed up pure blood every month, but not much.

Others have caſt forth great quantities, which have been otherwaies ſound, or ſhort breathed, and ſome have loſt their lives thereby.

And ſome in Feavers, and other Diſeaſes, have filled baſons with blood, and then died.

As I knew a young widdow that had a Conſumption from her Husband that died but a little before, who after ſhe had with great difficulty, voided ſharp Stones or Gravel with great pain by coughing, voided abundance of blood by the rough Artery, twice, and the third time died.

Spitting of Matter.

Somtimes there is Matter ſpit up with Flegm or follows it; ſomtimes it is clear, thin, or ſnotty; ſomtimes thick and white, yellowiſh, greeniſh, or blackiſh; ſomtimes without taſt; ſomtimes ill-taſted. Other voidings of matter follow other Diſeaſes, and are joyned to their great Symptoms.

The chief are pain in the Ulcers of the Mouth, Noſe, and other parts, as of the Jawes in the Squinzie, in which diſeaſes, Matter is ſpit up. Alſo in ſpitting of blood with Matter and a Cough, in the Pleuriſie and Ulcer of the Lungs, in which we have ſeen a baſon full of thin Matter ſpit up in a little time. The Conſumption of the body is joyned with ſpetting of matter with a cough in the Phthiſick, which continueth till death. As we ſhewed at large in thoſe Diſeaſes.

Alſo an Empyema joyned with a Pthyſick, the Spetting of Matter is the more.

The Spitting forth of an Impoſthum.

There is alſo a Spitting of Matter by which there is Matter ſent forth with its bag, as big as a peaſe or nut, one or more at a time, when they are little. Somtimes the Matter is ſpet forth before the bag, which is broken; this is accompanied with a ſhortneſs of breath, a Cough, and ends in a Phthiſick.

The

The Causes.

The Cause of all these Kinds of Spitting is from Spittle, or Flegm, or Blood, or Matter, or a corrupt Humor.

Plenty of Spittle is the Cause of Spitting of flegm

Often spitting comes from much water which is Naturally in the Mouth, to moisten it, mixed with Flegm; from an evil custom, as of Orators who that they may not seem to be out, will spet at every full point, or oftner. Also much water gathered to the Mouth by long moving of the Tongue in Discourse, may cause the same, Also medicines may cause the same, but because it is then profitable, it is not preternatural. Also the phansying or remembring of sharp, bitter, sour, or things pleasant to the Tongue and Palate, may cause the Mouth to water, but it is preternatural.

Flegm from the brain is the cause of Spetting.

The great Spitting in the Diseases called *Ptyalismus* comes from a water without taste or salt, or sour, falling from the Head into the Mouth, and mixing it self with the spettle. And if this Humor falls as low as the Lungs, it causeth the Spetting with a Cough which is mentioned. In which at first the humor is thin, and then thicker by continuance, and at length being baked with heat and white, it resembleth Matter: As we shewed in the Causes of Spetting of Matter.

Flegm sent from the Lungs to the jawes, is another Cause.

Flegm made of the Excrements in the Lungs, either like Snot or Matter, if it be coughed into the Mouth, causeth the like spetting. And this is usual in found and old men: And in the Disease of the Cough, and somtimes in the Asthma, in which it is not spet forth, and being clammy, causeth no Cough: As we shewed.

Moistness of the stomach, is another cause of Spetting.

Moisture carried up from the Stomach and mingled with the Spittle in the mouth, is the Cause of Ptyalismus or Spitting, as it is from the Head. In which Nature by often spetting, labours to disburden her self in the morning fasting, when the Stomach hath nothing in it but that water. The Cause of which Moisture of the Stomach, we shewed in the Weakness of the Stomach from that Distemper.

Spetting of Blood comes from Blood brought to the Mouth, from a Vein or Artery opened in the Nose, Mouth, Jawes, or Lungs, or Breast.

The blood from the Nose, is the Cause of Spetting is from the Mouth.

We shewed in Hæmorrhagy, how blood might flow from the Nose to the Mouth, but the plenty thereof, or when the lower Veins are opened, or when the Nose is stopped, and the Patient lyes upon his Back to stanch it, is the Cause of the Falling of it into the Mouth.

The Swelling, sucking, or hurt of the Gums, is the cause of spitting Blood.

Blood easily gets into the Mouth from the Gums easily when they are swollen, because they are soft, and so loose flesh. Or when they are sucked, as in the toothach, or otherwise hurt, as by picking the Teeth, or eating hard things. But especially when a tooth is pulled out, and torn from the Gums and Membranes. I once saw so great a Flux of Blood from an Artery opened by the drawing of a tooth, that it could not be stopped, and the Patient died thereby.

A Wound in the inward part of the mouth, is the Cause of Spetting of Blood.

Without great violence, blood will not flow from other parts of the mouth, as from the tongue, cut, or bitten, as it is usual in Convulsions, or from the skin of the Mouth wounded. Also Blood flows plentifully from the Veins under the tongue when they are opened, called the *Ranunculi* or Frog-veins. And I knew a widdower that caused both those Veins to be opened, who spit blood till he died.

The opening of the Veins of the Lungs by corrosion, is the Cause of Spetting blood

Blood from the Lungs is often spet at the Mouth, and it comes from the inward Vessels of the Lungs, which fill them with blood; being opened or broken, it is carried into the branches of the rough Artery, and thence into the windpipe, and so by coughing into the mouth, and then spet forth. Somtimes the Veins are opened by Anastomosis, and there is a Disease called *Hæmoptoica Passio*, or spetting of blood. As when there is a plenty of blood in the lungs which stretcheth the Vessels, and opens the Mouths thereof, till it sweat through, or flow forth, more or less. And this is often without other hurt, if the Mouths do shut themselves again, as we have seen in men of full bodies, and women that wanted their Terms through Conception, or the like. But it is dangerous, and deadly often, when the Mouths of the Veins are so enlarged, or continually moved, that they cannot be shut. Or when any part of the blood gets into the substance of the Lungs which putrifieth them: As we shewed in the Phthysick.

From the same Blood of the Lungs, that gets out by Anastomosis, and doth not go directly into the branches of the rough Artery, but first into the substance of the Lungs causing Inflammation, and thence into the branches of the rough Artery: There is a Spetting of Blood and Matter in the Pleurisie, and the Impostume of the Lungs, or Peripneumony: As we shewed.

When the great or small Veins of the Lungs are broken, there is a Flux accordingly with a Cough, and that is called *Hæmoptoica Passio*, which being hard to be cured, ends in an Ulcer of the Lungs, with the Phthysick. And this breaking of the Veins may be from violent Dilatation, or Contraction; as great blowing or whooping, or trumpeting; somtimes from a Cough or Sneesing but seldom; somtimes from violent holding of the breath in straining and Child-birth, or in carrying of burdens. Hence I have known divers Stone-cutters, which removing of great Stones spet blood, and became Phthysical or Consumptive, which the Vulgar supposeth to come from the Saw-dust which they breath in, but falsly, for if the dust should get into the rough Artery, it would presently be coughed out by its roughness, rather then sharpness which it hath not, and therefore cannot hurt the Lungs. The same may come from other violent labour, or from a bruise of the Breast, by a fall or stroak, or the like that breaks the veins.

When the Vessels of the Lungs are corroded, and the substance of the Lungs also, it is by degrees, and causeth a filthy Ulcer, there is the Phthysick rather then the Hæmoptoick Passion or Blood-spetting; Yet blood is from the Ulcer spet up: As we shewed in the Phthysick.

When Veins are opened in other parts of the Breast besides the Lungs, and they sweat through, or pour forth blood to the Lungs, there may be Spetting of Blood, as in the Inflammation of the Membrane, in the Pleurisie; or breaking of any Veins in the hollow Breast. But when the blood flows into the Cavity of the breast, and not into the Lungs and stayes, and corrupteth, causing a Phthysick, or Empyema; we shewed in the Causes of a Pleurisie: we cannot make this the Cause of spetting of blood. Except from a wound in the Breast and Lungs, when the blood flows not only into the inward parts of the breast, but into the Vessels, and so to the Mouth. And the rough Artery be wounded, the blood flows into the Lungs, and it is coughed up.

Ulcers in the Mouth, Nose, Jawes, Lungs, Breast, Causes of spitting of Matter.

Matter is spet from an Ulcer in some parts; as the mouth and nose, and the Jawes in the Squincie. Also from ulcered, rotten Lungs, in the Phthysick, as we shewed. In an Empyema there is Matter in the hollow of the breast which fals from the Lungs, and if the Lungs be rotten, and a way open thereby, it is coughed up, neither can it be sent any other way then by opening it externally. As we shall shew.

But

The Blood of the lungs turned into a matter, is the cause of Spetting of Matter.

But the Matter of the Lungs is not alwayes from an Ulcer, but from blood when the Lungs are inflamed without an Ulcer. And that Spetting of Matter in a Pleurisie and Peripneumony is blood ripened..

Somtimes Blood flowing in a small quantity from the Veins of the Lungs into some other part of the Lungs, where it stayes, and turns to Matter by degrees, which is by the dryness of the outside turned to a Bladder. And this is the Cause of the Spetting of Imposthumes, with little skins or bladders. And this may be without any other inconvenience, except the Matter so inclosed, hath hurt the Lungs. And then a Phthysick or Consumption followeth.

The Flegm of the Head, or Nose, falling upon the Lungs, is the Cause of Spetting of Matter.

There is a also a Spetting of Matter with Flegm for the most part, when Rhewm from the Head, is fallen into the Cavity of the Nostrils, or upon the Lungs, where it lyeth, till by Heat it be baked into Matter. This we have often seen in found people, and in flegmatick Diseases that cause Coughing, when there hath been neither Ulcer, nor Consumption.

The substance of the Lungs corrupted, is the Cause of Spetting of the Lungs.

It may come to pass, that a putrid Humor concocted, may so eat the substance of the Lungs, that a piece of them may be spet up.

The Cure.

The Cure of most kinds of Spittings joyned with other Diseases, is mentioned in those Diseases: But we shall speak of the Cure of other Spittings according to their Causes.

The Cure of Spetting of Flegm.

Often Spetting from an evil custom, as in Orators, is not to be cured, but by forbearing by degrees: If it come from much speaking, let him be silent. If a Ptyalismus or Spetting come from Rhewm in the head or from the Stomach, when a watery Humor riseth up and fills the Mouth. For that from the Head, you must hinder the increase of Rhewm, and purge it, and consume it, and stop the Defluxion, as in the Cure of a Catarrh, and Cough mentioned. As for that from the Stomach, you must hinder the increase of Flegm in the Stomach, and that which is must be purged, and the weakness of the stomach strengthned, with things mentioned in the Cure of a weak Stomach, which done, in both Causes, dry up the moisture in the Mouth, and draw it away with Masticatories to chew and the like, mentioned in the cold Diseases of the Brain, and in the Tooth-ach.

Spetting, by reason of a Defluxion upon the Lungs, or Flegm bred in the Lungs, is cured as a Cough.

The Cure of Spetting of Blood.

The Cure of Blood-spetting is divers, as blood is from one part or another. From the Gums when blood floweth, we take blood, because it is a sign of Plethory, least it should cause worse accidents: And we cure it as a Plethory. And if it continue, we use astringent Mouth-waters. Bleeding from a Tooth drawn, although it stop usually of it self, yet it stops sooner, when the Mouth is washed with red Wine, Rose Vinegar, and Rose-water. But if it stop not by reason of a Vein or Artery broken, then you must use Astringents, mentioned in the Inflammations of the Mouth, and loosness of Teeth: And if it cease not, you must stop the place from whence the tooth was taken, with Pouders mentioned in Bleeding of Wounds. Burnt Vitriol is excellent. If these will not do, use an actual or potential Cautery that will burn speedily, least it be held long in the Mouth. And this is done well with a Pill made of Cotton, and dipp'd in Aquaf ortis, and stopped into the space between the Teeth. And this we have found by Experience, to have done the work, when others fayled, in this and other bleedings. When bleeding is from other parts of the mouth, hurt or wounded, it is stopped with the same washings of the mouth. And if there be a great Flux from the biting of the tongue, as I have seen after Convulsions with danger of death, then you must use stronger Caustick.

When Blood falls from the Nose into the Mouth, it is cured, as the bleeding at the Nose. But if there be danger, least it falling into the Mouth should be swallowed, or fall upon the Lungs, which can scarce be, for when it comes to the rough Artery, it causeth a Cough which casts it forth: He must lie with the Face downward, that it may rather flow out at the Nose then backward. Also you may keep it from flowing down, with holding water in the Mouth.

Blood-sweating from the Lungs, and mixed with Spetting, and coughed up in a Pleurisie or Peripneumony, is cured, as is mentioned in the Pains of the Breast.

The Cure of Hæmoptoica Passio, or Spetting of Blood.

The Hæmoptoical Passion, although it be in some, especially women, without other hurt; yet is it somtimes dangerous, if often, and in great quantity: And somtimes deadly, though the sudden loss of blood, both in Diseases and without. But usually it turns to a Consumption. Therefore it must be stopped in time, and if the Mouths of the Vessels be open, they must be closed: And if they be broken, they must be healed. And in both cases, the blood that clodders in the breast must be cleansed, least it hurt the Lungs, and the Cough cured. But if the Lungs be ulcerated, and there be blood voided with matter, from the corroding of the Veins; then you must cure it as a Phthysick by healing the Ulcer, and the like.

For the Cure of the Hæmoptoick Passion, or Spetting of blood, is as followeth.

There must first be Evacuations by Blood-letting in the Arm, upon which side there is a pain, or heavyness, or pricking.

Also by Scarification, with Cupping in the Shoulders, sides of the Neck, and Wrist; or by a great Cupping-glass under the Ribbs, or Hypochondria's. Also by using Ligatures, and Frictions, as in Bleeding at the Nose.

In full bodied Women we provoke the terms, if stopped or but few. And in Men the Hæmorrhoids, if they formerly had them.

If the Blood be watery we purge, but with mild things, and not hot, least they should cause Vomiting, which would do hurt. And with things that astringe, & stay other Fluxes, though they open the belly, as Rhubarb in pouder, with Juyce or Syrup of Plantane, or Purslane, and a little Spikenard.

Alteratives must be in their Meat, and Medicines.

Let the Air be cool, and dry, either Naturally or Artificially, because it being taken immediately into the Lungs, will dry well, as burnt Frankincense, Mastick, and the like.

Let the Meat be glutinating of boyled Flesh, boyled Snails are commended, and the blood of Turtles and Kids. Let him eat Starch boyled in Rose-water; and things made of Rice, or Barley, and rear Eggs, with boyled or raw purslane in Sallets: Also sour Fruits. Let him drink water, milk, ptisanes, and the like, avoid strong wine, and other things, actually or potentially hot.

You must provoke sleep, if it be absent.

Let him beware of coughing and speaking loud, or much.

The Emplastick Medicines and Astringents mentioned in the Hæmoptoick Passion, which stop the Mouths of the Vessels and heal, not with too much binding, least the blood be stopped in the breast, with such things as dissolve and cleanse the breast, not too sharp and sour, may also be used.

Let him drink morning and evening for two or three dayes this Decoction. Take *Comfrey roots two ounces, Marsh-mallows roots one ounce, Purslane,* if it be to be had green, *Plantane, Shepheards-purse, Solomons-seal, each one handful; red Roses one pugil, Seeds of Purslane, Plantane, Sorrel, Endive, Coriander, white Poppies, each one dram; Myrtle-berries three drams, Jujubies, and Sebestens, each six pairs.* Boyl them in Rain-water, or Cistern-water, when it is strained, add *to one pint and an half thereof, as much Sugar, Penidyes, or Honey of Roses as will make an Apozem.*

Other things are good in a Decoction, as Roots of Avens, Brambles, Oak barks, or Acron-cupps, Sumach, Horstayl, Comfrey, Willow-herb, Vervain, Flowers of Teazles, Cheese-wort, Osiers, Reeds, Pomegranates, Harefoot, Leek, and Rose seeds, the Berries of bloody Rod.

They mix with these Plants for Wound-drinks, to heal the Veins, as Winter-green, Mousear, Sanicle, Golden Rod, wild Tansey, Yarrow, Agrimony, Nosebleed.

You may add for the Breast, Liquorish, Coltsfoot, Melon seeds, and Herbs that thicken the blood, as Violets, Endive, Bugloss, Water-lillies.

Some commend the Decoction of Iron, and Harts horn, in plantane-water, or the Decoction of the pouder of Blood-stone.

You may make a Syrup of the former Decoction to keep it longer, with more Sugar, and give it by ounces.

Or a Syrup of the other plants, as of purslane, which is best; it is made of three parts of the Juyce of Purslane, with two parts of Sugar boyled to a consistance. In the want of which, you may use the Syrup of Purslane by *Mesue*, of it, with Juyce of Endive, Vinegar, and Sugar. Juyce of plantane in a Syrup is also good.

The usual Syrups are Astringents, as that of dryed Roses, Myrtles; and Thickners, as of Jujubes, Violets.

You may give also the Juyces of the plants aforesaid, alone, as of plantane, purslane, or with others, and with Honey, or Sugar.

Some give Juyce of Sage, and Mints, with Sugar or Honey.

The distilled Waters are good in three ounces or more at a time, especially of purslane, plantane, Solomons-seal, Shepheards-purse, Comfrey, with other Astringents, as Horstayl, privet, Myrtles, Oak leaves, Roses. Some commend Water of Sowbread; others that of Mints and sugar.

A Compound Water is thus made. Take *red Snails out of the shells one pound, Comfrey roots half a pound, Plantane, Purslane, each one handful; red Roses one pugil, Myrtle-berries half a pugil, Juyce of Quinces, Bar-berries, or Cornel-berries four ounces, Spikenard half a dram*: distil a water.

There are pouders of divers things to be given with Sugar, because they are unpleasant, as this. Take *Comfrey-roots one dram and an half, Seeds of Purslane, Plantane, white Poppy, St. Johns-wort, each one dram; red Roses half a dram, Pomegranate flowers one scruple, Starch, Amber, each one dram; Gum Arabick and Traganth, each one scruple; burnt Hares horn half a dram, Bole, or sealed Earth, red Coral pondered, each two scruples; Dragons blood one scruple, Sugar of Roses, or Penidyes as much as all the rest*, make a pouder, give *a dram, or a dram and an half at a time.*

The Pouders of the Troches of Amber, or sealed Earth without Opium, or of burnt Ivory, are also good.

To which you may add Grape seeds, Bar-berries, Myrtles: Also Frankincense, Mastick, Ashes of Egg-shells, Cuttle-bone.

Old Conserves of Roses also, often taken, and that of Comfrey roots, and Sugar, or Honey, or of the strongest Herbs mentioned.

Also candied Comfrey roots.

And this Electuary. Take *Conserve of Roses, Violets and Comfrey, each one ounce and an half; of Quinces one ounce, of the Pouders mentioned, two drams, Acacia one dram*: mix them *with Syrup of Myrtles.*

Another when there is fear of congealed Blood. Take *of the Looch of Purslane, Pouder of Comfrey roots half a dram, Amber one scruple, the Runnet of an Hare half a scruple, with Syrup of dryed Roses*: mix them, let him take it often. Some add Mummy, when the blood is clotted.

Or this Lohoch. Take *a White of an Egg well beaten, and* add *as much Mucilage of Fleabane, made with Purslane-water, and the Infusion of Gum Traganth in Rose-water, with Penidyes, and a little Starch.*

The Lohoch of purslane is the best against blood-spitting, made of Juyce of purslane, Gum Arabick, Dragons blood, Troches of Lemnos, Earth, Amber, burnt Hares hair, and Sugar.

Another of Traganth, and Arabick infused in Rose-water, and old Conserve of Roses, Syrup of dryed Roses, Lemnos, Earth, and Bole.

You may make Lozenges of the aforesaid pouders, to be held in the Mouth, with Gum Traganth infused in Rose-water, or with Sugar dissolved in proper Water.

Sugar of Roses, and Diatragacanth frigid, are good to be held under the tongue.

Potions are thus made, or Juleps. Take *the Syrup of Purslane, and Plantane, each one ounce and an half; Water of Solomons-seal, Shepheards-purse, and Roses, each two ounces*; sweeten it with *Sanders* or *Spike*. Let it be given at thrice.

Of other Waters and Syrups you may make the like.

Or: Take *one dram and an half of the Pouder mentioned, and give it with Water, or Milk, or Water and Honey, or with some Syrup, and then you may give half a dram without Sugar.*

Or this: Take *Syrup of Purslane, or Plantane one ounce, of Myrtles, and red Roses dryed, and Wine of sharp Pomegranates, each half an ounce; Bole, or sealed Earth, Coral, each half a dram; Bloodstone and Amber, each one scruple*; or *of the Pouders, or the Troches mentioned, one dram*, give it *with Water of Shepheards-purse, or of Solomons-seal.*

We make these stronger with Narcoticks, which do not only astringe, but stupefie the sense, and keep the motion of Nature from bleeding, and asswage the Cough, they are thus made.

An excellent pouder. Take *Sugar boyled with Rose-water, or Violet water till it be thick, one ounce, Pouder of Henbane seeds one dram, give one dram at a time, alone, or with convenient Liquor*, you may add *Pouder of red Coral, Bole, or other fat Earth, each half a dram, Gum Arabick one scruple, Penidyes two drams, then give one dram and an half*, if the Flux be violent, or add the pouders that begins thus. Take *Comfrey roots &c. and Henbane seeds two drams.*

They may be made into Lozenges, with Gum Traganth infused in purslane-water.

Or give this Opiate. Take *Conserve of Roses, or Violets one ounce and an half, white Henbane seed pondered, one dram and an half, Syrup of Poppies, or Diacodium one ounce: The Dose is a dram at a time.*

Philonium persicum, and Diacoralium of *Galen*, the Troches of Winter-cherries with Opium; which have besides the binders, and the Opium, Henbane seeds. Also the troches of Amber, with Opium. All these are given a *a dram* in weight with convenient Liquor.

Athanasia Nicolai is commended, Treacle and Mithridate are not so good here.

Seven grains of Cynogloss pils which have Opium, and Henbane seeds, are good to stop Blood and Fluxes.

The Syrup of poppy, or Diacodium, with Syrups, Juyces, and other convenient Waters, is good also.

Outward Applications can do little to stop Veins in the Lungs, because they grow not to the breast, and strong astringents laid to the breast, do keep in the blood; therefore use only a little Oyl of Myrtles, Mastick, or Quinces which do but little good or hurt. And if the Vein be opened in the breast, apply stronger things where the pain is, for then there is no spiting of blood, as I shewed.

You may here if the bleeding be great, apply things to the Liver, Stones, and other parts, as in other Fluxes. As the Amulets for bleeding at the Nose.

That

The Cure of Spitting of Matter. That Spitting of Matter which is from Flegm changed into Matter, is cured as the the spitting of Flegm.

If it be mixed with blood comming from the Inflammation of the Lungs, cure it as a Pleurisie or Perinneumony, or Inflammation of the Lungs.

If it come from an Ulcer in the Lungs, cure it as the Phthysick. If it come from the cavity of the Breast in an Empyema, passing through the Lungs ulcerated, cure it as the Phthysick also, opening the Breast: As we shewed in the Excretions in the Superficies of the Body.

The Cure of a bladder or imposthume spet up. If a Bladder with Matter be voided by spitting, either whole or broken, cure it as an Ulceration of the Lungs in a Consumption. But if the Lungs be not hurt or no signs thereof, you must not take that course; except, after they have bin often voided, there be a suspition that others may grow, then by the medicines mentioned for the Cough, you must hinder the growth of them. And if they be new grown, as will appear by the heavines of the Lungs, least it should hurt the Lungs by Continuance; *Dioscorides* orders that Goats Organ, and Sowbread seeds be often drunk, or licked with Honey. The Fume of dryed Colts-foot will do the same. And other strong expectorating Medicines.

CHAP. IX.

Of Vomiting.

The Kinds,

A Vomit or Vomiting by which the thing taken, and other Humors and Excrements are sent forth from the Stomach by the Gullet and Mouth, is almost alwayes preternatural, though it doth good, because it is not usual and necessary as spitting, pissing, going to stool, nor is it so easie as those, when they are according to Nature; but is like a Cough with labour, pain, crying, and sweat, and there goes before a loathing moistnes and bitternes of the mouth, trembling of the Lipps, and other accidents, worse in them who are unfit, and hard to vomit. And it is chiefly preternatural, when it is often and much, or things are voided that ought not.

Preternatural Vomiting. These are of divers sorts, both in Diseases whose symptoms they are, and without Diseases.

When Vomiting is without a Disease or other accidents, but only those of Vomiting, that is after Gluttony or Drunkennes: They cast up their gorge, and immoderate wine, and therewith somtimes many Excrements, both of Flegm and Choler. This happens to many, either suddenly or after sleep, with a Dizines. And though it refresh, yet if it be usual, and continue long, it weaknens the Stomach, and leaves thirst and other accidents.

There is another Vomiting after nauseous meats, by which they, and other things are cast out of the Belly; and this, if immoderate is hurtful.

There is also another which is usual, and comes after the giving of venemous medicines purges especially, which are suddenly thrown up again; or when they begin to work downwards, with divers Excrements.

Also that Vomiting which is from a Vomit given on purpose, if it be violent or much, is dangerous. And such symptomes as follow Cholar, follow these Vomitings.

There is another usual Vomiting with Women with Child, who Vomit after their Conception, when fasting, or after meat.

And though this is without hurt, yet if it be with great force, and continue, it hurteth.

There are some Vomitings when Men are sick, in which some throw up easily too much, or nauseous meat, crude and unconcocted.

Some vomit much Flegm, Snot, Choler, especially in the morning, with pain of the Heart before, and fourneſs, bitterneſs, and roughneſs of Teeth after it. All which, though they give ease, yet by continuance, they hurt, and bring other Diseases. As that excellent Printer *Frobenius* that used after his first sleep for many years, to vomit corrupt matter blackish, dyed after of the same Disease.

In divers Diseases of the Stomach, Guts, and other parts, Vomitings are with other symptoms: As I shewed in them which are different in respect of Flegm, Choler, or Blood.

Vomiting of Flegm. There is in divers Diseases, Vomiting of Flegm alone, or with other Humors. And it is either clammy, snotty, glutinous, muddy, frothy, or watery, either sweet, sour, or sharp, al these are called flegmatick. We shewed this in other Diseases at large.

Vomiting of Choler. Vomiting of Choler is as usual in many Diseases, where it was described, in which yellow, or like Brimstone, or like the Yolk of an Egg is voided, which is tough, or green, and that like Herbs; moist and thin, like Leeks, or Horehound in colour; or so green, that it is compared to Verdegreece, or black, or skie-coloured; which I saw plentifully vomited by women in a Dropsie alone. And then there are worse Symptoms.

The Disease of Choler. There is a kind of cholerick Vomiting, worse then the other accidents, which is accompanied with purging of Choler, this is called the Disease of Choler: differing from the Colick.

A continual Purging or Vomiting with great force and conturbation, is of sharp and bitter Choler, thin, or thick, green, black, or yellow, pure, or mixed, and sometimes bloody.

There are great Pains in the Belly, and Guts, with pricking, and pain of the Back and Loins.

There is often herewith burning of Urin by reason of Choler.

And an intollerable thirst without a Feaver, which is but somtimes, called a *Synochus*, which we described in cholerick Diseases, which is not great, nor can be, except another Feaver come.

Then follows great weakneſs and faintneſs, the pulse is swift and weak, and when the Disease continueth, and increaseth, there is fainting and swounding, the Heart beats, and when the outward parts begin to grow cold, and of a cold sweat, Death is at hand. Usually a Convulsion followeth, before which went the Hickets, and Cramp of the Legs, which foretelleth the Danger.

Vomiting of Blood. There is Vomiting of blood but seldom, in Diseases that have others joyned therewith, and in women that want the terms, in which blood is vomited alone, or mixed with them; somtimes more plentifully pure or mixed; somtimes clodded and tough like Pitch, and black, somtimes like Ink, which a famous Lawyer vomited in abundance, and purged also: Not only purging of blood, but great Diseases follow this Vomiting.

Vomiting of Dung. There is also a Vomiting of Excrements by themselves, or with Humors mentioned: when the dung of the belly which should be sent forth by stool, is vomited at the mouth, of which we shall speak when we treat of the wrong passage of the Dung.

The Causes.

It is necessary in all Vomiting that the Stomach be troubled, from whence the expulsive Faculty is stirred up, to expel

expel that which troubles it, and throws out all, or some part that is in the Stomach into the left upper Orifice, and so into the Gullet, by the help of the Midriff which is near to it. This Vomiting is called the subvertion of the Stomach. The stomach is thus affected, either when it is troubled, or oppressed, or pricked. And the sooner when the Cause is great, or many meet, or when the stomach hath a most exquisite sense, and easily suffereth, or loosned from an evil custom of Vomiting, cannot so righty contain the meat, and cannot contain them, when they are too many, or unpleasant. The Cause of the troubling, pressing, or pricking of the stomach, is either from external force, or from things taken in, or from the Humors, Excrements, and other things in the Stomach.

The trouble, oppression, or pricking of the stomach either from outward force, or things taken in, is the cause of preternatural Vomiting.

Outwardly the rubbing of the stomach, or violent thrusting, or bending forward, or motion by Wagon or Ship, especially after much eating, or drinking, or lying down after Drunkenness, causeth Vomiting, by disturbing the meat in the stomach.

The Finger, or a Quill, or the like, thrust into the throat, by tickling the tunicle of the mouth, which consents with the stomach, causeth it by labouring to expel what offends it, to throw out whatsoever is contained therein.

From too much meat and drink, especially wine, the stomach being too full, vomiteth; and the rather, if they offend the stomach. And this may come from a Physical Diet.

If things be taken that are loathsom, they are vomited up again. As unusual meats, (as we shewed in Loathing) and such as Nature abhors, or filthy, and abhominable things, either by chance, or necessity: the very conceit, or imagination of which maketh some vomit. Also ill-scented things, as medicines, especially Purges cause a Loathing, and therefore are often thrown up again; some meats are loathed, not because they are unpleasant, but because they are contrary to some Natures, so that if by chance they be eaten, they are spewed up again. In many Diseases where meat is loathed, any smell of Food, flesh especially fat or roasted, which is of it self pleasant, is loathsom, and they vomit it up.

Medicines taken, that prick the stomach, or burn it, or that purge, as Hairs cut, or shavings of the Nails will provoke Vomiting, and if they work long, or violently, they are the Cause of hurtful Vomiting. Other vehement medicines, especially purges do the same by troubling the stomach. And they are vomited as soon as taken, or when they begin to work, they cause the pain at the Heart, and so Vomiting. But chiefly corroding medicines or poysons taken by chance, or otherwise. In which Vomiting, whatsoever juyce, humors, or Excrements are in the stomach, are thrown out together or a sunder: But chiefly thin Choler, as we see after the giving of Stibium or the like, it hath been voided by basons full. Which was not in the stomach or Guts before, because there were no symptoms of it; but it was forced by Nature from the Meseraicks, through the violence of the medicine, as we shall shew in Vomiting of Choler.

Choler pricking the Stomach, is the cause of the vomiting thereof.

Besides many things swollowed by chance, have caused Vomiting.

Among Humors and Excrements, Choler is the chief cause of Vomiting, either fasting, or in Diseases of Choler. And if it be clammy, as that like yolks of Eggs, or sharp, as the green and black, it pulls and burns the stomach, and makes not only Vomiting, but purging; and the more, if it be plentiful, and sent to the Guts, especially the thin Guts which are united to the stomach. And it is greater or lesser, as it is more or less offensive to the Stomach and Guts.

This Choler breeds in the stomach from meats, which are too hot, and of sharp cholerick Juyce, or turns suchby Corruption in the stomach. As appears by the use of Cowcumbers, and Melons, as we shewed in the Disease of Choler. Also Choler that is sent from the gall, and corrupted, may turn to such, and cause the same. Also when it hath been long in the Meseraicks till it corrupt, Choler may get into those parts, and cause the Disease of Choler. As we shewed in the Causes of intermitting Feavers, how it was gathered in the Meseraicks, and of what it was made.

The Cause of Vomiting of Flegm is the fulness of the Stomach or Loathing.

Somtimes vomit is raised from other Humors and Excrements which fill, or offend the stomach. As from crude Juyce made of meat not well concocted, which flowing in the stomack, and filling it with wind, compels it to vomit it up four for the most part. Or from other sharp Juyces, besides Choler, made of the Corruption of meat. Whence come Vomitings not long after eating, or when Concoction is beginning. Also Vomiting may come from any Flegm, or from tough Matter in the Stomach, long retained, or from water, which cause Loathing; as we shewed in the Want of Appetite: Or from other immoderate things, especially if there be other evil Humors mixed. These alone, or with other Humors bred in the stomach, or sent thither, offending the stomach, cause Vomiting in divers Cacochymicks, and in Women that are with Child, and want their Terms, or others that have not conceived, by reason of the filth stopped with the terms; and in the beginning of Feavers, and other malignant Diseases, when the stomack consenteth, or is hutt by them. As we shewed in the Causes of these Diseases.

Vomiting of blood from the stomach filled with the blood from the meseraicks.

Blood getting into the Stomach by the Meseraick Veins which go through the same, or rising from the Veins of the Guts, is the Cause of Vomiting blood, and as the Blood is, so is the Vomiting; somtimes watery, filthy, or black, such as is laid up in the Meseraicks, as we shewed in Feavers; sometimes when it hath been long in the stomach, it grows thicker. Now it gets out of the Veins, either from the plenty thereof; as we shewed in the stopping of the Terms, that Women with Child may vomit blood without hurt, or from the ceasing of other bleeding at the Nose, or when blood is in the Body from the taking off of a Member. Or from the thinness of the blood mixed with water, or from the thinness of the Choler in divers Diseases, or from other impurity or malignity. Also Blood is vomited somtimes from a Contusion, about the stomach, upon the parts adjacent; or from some hurt of the stomach, by any thing swollowed, or a wound. Also blood from the Jawes, or Nose, or Breast swallowed down, is vomited up in clodders. As I lately observed in our Cap-maker, who being loaden with his wares, and comming from a fair, towards night, made great hast to get into the City before the Gates were shut, but being tyred, he lay in the Suburbs all night in a sweat. And comming into the City the next morning, he grew very weak with Vomiting of clotted Blood, with a Megrim, and purging also of Blood.

The Cure.

When any thing is sent forth by Vomit, profitably or necessarily, it must not be stopped, but provoked, if it come not freely. But if by violence, and long continuance, the strength decay, or the like, then you must make it more easie, or shorter. When it is unprofitable, as of meat or medicine, it must be prevented and stopped.

The Cure of preternatural Vomiting from things taken in.

If Vomiting come after surfeiting, or Drunkenness, it must not be stopped, but furthered. But if it be often, take heed of it, and use things mentioned in Alienation of Mind, and let them not sleep presently upon a full stomach, nor let them cause

Giddi-

Giddineſs uſually goes before, with reading or motion. And if it continue, give things mentioned Againſt, Vomiting, Choler.

When Vomiting is from Loathing of things neceſſary which were better kept in the Body, that muſt be prevented, eſpecially after a purge is taken, becauſe if it be ſuddenly vomited up, the working is loſt, but if it be kept any while, the medicine may have an Operation, though caſt up with many Excrements, which could not go downwards.

And though the ſtools are not large, becauſe of the double Evacuation, yet the medicine will work its effect. And the rather, if it be not all vomited up.

You muſt prevent the Vomiting up of a medicine, with pleaſant ſcents and taſts, which reſiſt the evil ſcent and taſt thereof; as with a cruſt of bread toaſted, and dipped in Vinegar, applied to the Noſe, with the pouder of Nutmeg or Cloves; or by tying a clout dipped in Vinegar, about the Neck; or waſhing the Mouth with Vinegar and Water. Or by eating or chewing ſome ſharp fruit, or other pleaſant thing.

An Egg held to the throat, is thought by the common people to hinder the Vomiting of a medicine. Alſo there are many things in Vomiting Choler, which will prevent it here.

But if Vomiting begin when the purge ſhould work, with pain at the Heart, it is not amiſs, becauſe Evacuation is made both wayes. Yet becauſe they are weakned by the heart-pain, ſo that they ſound ſomtimes, let them waſh the ſtomach from that which pricks it, when it firſt begins. As Barley-water, which *Hippocrates* ſaies muſt be taken warm with Sugar, or Cream of Barley, with Sugar, or Peaſe-broath, whatſoever allayes pricking is then good: As any Broath of fleſh.

A Clyſter then given, takes away the Heart-pain, and quickens the medicine, and hinders the Vomiting.

If Vomiting follow the violence of any medicine or poyſon, then we give things to reſiſt the ſharp burning, and malignant force, and to cleanſe, that they may vomit eaſily, and ſtop it not. Or if we do, it is with ſtupefactives, to take away the ſenſe of the ſtomach. Or we give Antidotes againſt poyſon, which if they have Opium as Treacle, are the better. Such as are mentioned in the Pain of the Heart.

The Cure of Vomiting of Flegm raiſed from Excrements.

If Vomiting be from Flegm, or any crude Humor, or Excrements, whether in Cacochymicks, Women with Child, or Diſeaſes, and Excrements be voided thereby, it muſt not be ſtopped, But if it come often, and in found men, or ſick, it is convenient, or if it be too violent, you muſt ſtop it, obſerving diligently if it be in women with child, or the Patient be ſick of another Diſeaſe, that proper medicines may be given.

Vomits are given in Vomitings, when there is a tough Humor in the ſtomach, which continually provoketh, and yet will not be voided, but alwayes provoketh to vomit. Then you muſt give a Vomit that cleanſeth and cutteth, when it is clammy. The Kinds of Vomits are mentioned in the Cure of Weakneſs of the Stomach.

Purgers to provoke downwardly, are given when vomits cannot work, or ſufficiently diſcharge, that they may ceaſe to moleſt, and paſs the uſual wayes. Such are mentioned in the Weakneſs of the Stomach. But you muſt make choice of the beſt, and pleaſanteſt Purges, leaſt they be vomited up again. Among which the purging wine is the beſt: Or Pills, if they can be ſwallowed.

Clyſters alſo draw down the Cauſe, and are good in great Vomiting, not given in great quantity, nor too ſharp or looſning, leaſt when they get into the Colon, they ſhould preſs the ſtomach that is near, or relaxe it, or provoke it: ſuch as are mentioned in the Colick.

When in a conſtant Vomiting no meat can be retained, you muſt preſerve the Patient with nourihing Clyſters: ſuch as are preſcribed in the Hectick.

When the Matter is voided by Vomit, by Nature, by Art, by Stool, you may give things to ſtop ſuch are in this Cauſe, hot and binding, proper for the ſtomach, ſuch as are mentioned in the Weakneſs of the Stomach. To which you may add the following, which are good when Vomiting is too violent.

Cinnamon-water being pleaſant, is good to ſtop Vomiting, and other diſtilled Spices, that are not loathſom, mentioned in the weakneſs of the ſtomach.

Wine is beſt to ſtop Vomiting, becauſe it is pleaſant to the ſtomach, eſpecially Rich-wine.

A Phyſical Wine made by Infuſion, which is bitter, is better then ſweet, becauſe that provokes Vomiting. That of Wormwood is beſt, to which the matter is very tough, we add Squills, Gentian, and topps of Centaury.

Another of Mints, Marjoram, topps of Roſemary, Bertony, Myrtle-leaves, red Roſes, Coriander ſeed infuſed in wine, with Wormwood, Cloves, Nutmegs, Mace.

Hippocras is good alſo, or other Wines, mentioned in weakneſs of the ſtomach, or made of the Aromatical Pouders in wine, as ſhall be ſhewed; with Pouder of red Coral, with but a little Sugar, leaſt the ſweetneſs offend.

Decoctions are not ſo pleaſeant, but are eaſily vomited up, but they may be made into a Syrup, and given by ſpoonfuls: As of Wormwood, and Mints, with wine, with Juyce of Mints, Pomegranates, and Quinces.

Or this Decoction. Take *Roots of Cypreſs, Galangal, white Thorn, each half an ounce; Mints, Betony, Burnet, each one handful; Roſemary topps one pugil, Coriander ſeeds two drams, Piony ſeeds one dram, Schœnanth, Spike, and Coral poudered, each one dram and an half*; boyl them *in wine, and Water, and with Sugar* make a Syrup.

It is good to eat Beans, Kidney-beans, Lentils.

Dioſcorides directs twenty two Lentils.

Divers Stomach-pouders, mentioned in the weakneſs of the ſtomach, which are aſtringent, as Aromaticum Roſatum, and Gary ophyllatum, Roſata Novella, and Diagalanga.

Or make this aſtringent Pouder. Take *Roots of Cypreſs, Galangal, Acorus, Caſſia Lignea, each one dram and an half; Nutmegs, Mace, Cloves, each one dram; Schœnanth, Spike, Wood-Aloes, each half a dram, Pepper, and Ginger, each half a ſcruple*: make a Pouder, which will be ſtronger, but leſs pleaſant, *with Marjoram, Mints, Roſes, each half a dram; Maſtick, or Frankincenſe two ſcruples.* Theſe are given with Wine and Sugar.

Alſo there are many Conſerves, and Candyes good, as that of old Roſes, Mints, Marjoram, Citrons, Nutmegs, and the like.

You may apply to the Stomach, ſtrengthners and aſtringers, mentioned in the weakneſs thereof, chooſing thoſe which are beſt ſcented.

Anoint the Stomach with Oyls there mentioned, which ſtrengthen and bind. And leaſt the greaſie ſcent offend the ſtomach, keep the Head off, and uſe ſome ſweet Scents. Or ſprinkle ſome ſweet Pouders there mentioned, after anointing, or mix ſweet things with the Oyntment. Oyl of Nutmegs is good for that.

The Oyntment mentioned for a moiſt and looſe ſtomach, is good if you ſweeten it.

It is better to apply Plaiſters, leaſt by chaſing the ſtomach, you cauſe Vomiting, as that of Maſtick, mentioned in the weakneſs of the ſtomach.

Alſo the Fomentations there, which ſtrengthen and aſtringe, which are the better for being ſweet-ſcented.

The ſweet pouders alſo there, are to be ſprinkled here upon the Oyntments, and to be applied in bags to the ſtomach.

Alſo uſe the Cataplaſms without the unctious things, which are well-ſcented, and there mentioned.

The Juyce of Mints with Leaven, laid like a plaiſter to the Stomach and Guts, doth quickly cure Vomiting of flegm and wind. And the ſame is good for cholerick Vomiting, and the Diſeaſe Choler.

Alſo Cupping, Dropax, Ligature, Amulets, are good, but beſt in Vomiting of Choler.

Remembering alwayes a ſpare and convenient Diet.

The Cure of cholerick Vomiting and the Diſeaſe Choler.

If Vomiting come from Choler, or a ſharp Humor, from corrupt Meat, or otherwiſe which pricks the Stomach, when theſe are voided, you muſt provoke rather then ſtop it. But if it be often in Cacochymicks, becauſe it is worſe then that of flegm, and cauſeth hurt, threatning diſeaſes, it muſt be cured. As alſo when it is immoderate, and vehement. And in regard Vomiting is the chief ſymptom in the Diſeaſe Choler, and ſo dangerous: The cure in general muſt be aimed at. This Diſeaſe of Choler is moſt acute and dangerous, if it come without a manifeſt Cauſe, but it is leſs dangerous, when it is from eating of Cowcumbers, Mellons, or the like turned into Choler. And it threatneth Death, if the Pulſe be weak, the Heart beat, and faint, with Hickocks and Convulſions: And if the Pulſe intermit, and the Urin be blew, and the outward parts cold, Death is at hand.

Your aim in curing of theſe immoderate Vomitings of Choler, or ſharp Humors, is to cleanſe away the Choler that ſticks ſo faſt with other Humors, alwayes regarding the Diſeaſe and other Symptoms if there be any,) and to abate their force, and drive them down when they aſcend too much. And then to ſtrengthen the Stomach and Guts by aſtringents. And if need require to take away their ſenſe of feeling, with inward and outward Applications. And to have regard to the ſtrength, and to drive away all accidents approaching, and to mind the flux of the belly in Choler: which are all done by theſe following.

The Vomits mentioned in Heart-pain from Choler, are good here to take away the Cauſe. Theſe alſo evacuate Choler that cleaveth, and ſtop the violent Flux of the Belly by Revulſion.

Alſo Purges mentioned for the Heart-ach, from Choler chiefly Myrobalans, and Rhubarb, with Spike which corrects it, and ſtops all Fluxes, giving alwayes things which ſtop the Vomiting by drawing the Choler downwards. The things mentioned in Dyſentery, are good in the Diſeaſe Choler, becauſe the belly flows too much, when the Choler ſticks to the Guts. Stronger remedies are not given but to prevent in ſuch as are ſubject to it. And therefore in the time of the Diſeaſe, abſtain from them.

Clyſters are beſt to draw down Choler, which cleanſe and allay Heat.

Many Alteratives are good, which are mentioned in cholerick Heart-ach, if you chooſe thoſe that bind, and are not nauſeous, as alſo theſe.

Sour Fruits raw, or boyled, eaten, or uſed as Sauce, or the Juyces thereof in Meats, if not too ripe, as Grapes, Cherries, Medlars, Services, Cornil-berries, alſo four Pot-herbs, or eaten with Vinegar, candied Cabbage topps, and Turneps.

The conſerved or candied four Fruits are good, alſo Myrobalans, Citron barks candied, Conſerve of Roſes, and Sorrel.

Alſo the Juyces of the ſame four Fruits and Herbs, without Meat ſtay vomiting. Alſo vinegar drunk alone, after a ſurfeit, or Drunkenneſs, as it allayes Drunkenneſs, ſo it hinders vomiting. Wormwood-wine cures the vomiting of Choler, therefore Drunkards uſe it for their mornings-draught, when pain of the Heart forerunneth it. Alſo to drink cold water after Meat, will ſtay vomiting.

Thoſe four Syrups mentioned in Heart-pain are good, given alone, or with Sorrel-water. And you may add which is the beſt of the Syrup of four Pomegranates four parts, of Mints one part.

Or boyl the Juyces of both to a Syrup, or boyl a little Mints, with the Syrup of Pomegranates therein.

The Chymiſts give ſome drops of the Oyl of Pearl in this Diſeaſe.

You may make a Pouder to be given in wine, or otherwiſe thus, Take *Pulp of Quinces, or of four Pears, Medlars, or Services, or Cornil-berries dryed before they be ripe, half an ounce, dryed Citron peels one dram, Galls half a dram, Cynk-foyl roots, Sorrel ſeeds, and of Plantane, Grapes, Barberries, Stomach, Pomegranates, Roſes, Coriander, each one dram, Roſes and wild Vine, each half a dram; Aniſpodium of Ivory, or Harts horn, red Coral, each one dram and an half; Cryſtal half a dram, Pearls one ſcruple, Bole, or other fat Earth one dram, Hypociſtis half a dram, Red Sanders, and Groſs Cinnamon, each one dram*: make a Pouder.

Alſo the Pouder of Maſtick, Frankincenſe, Amber, with the Yolk of an Eg, and a little Salt.

Alſo Pouder of three leaved Graſs, Cheſnuts-ſhells, Mallow-ſeeds, Cherry, Gum drunk with wine.

The Moſs of Trees called Lungwort, and the Leaves of Harefoot, with the Seed, is commended by *Dioſcorides*.

Alſo Diacydonites without the Species, Troches of Spodium, with Sorrel ſeeds. Alſo Troches of Frankincenſe is good, except the ſcent offend, as that of *Rhaſis*, of Frankincenſe, Maſtick, Bole, Amber, Champhire, Gallia Moſchata, with Cloves to ſweeten.

The Pouder of Liquoriſh with Ivory and Cinnamon given in Broath, ſtayes both Vomiting of Choler and Flegm, and are good after the taking of a Purge.

Alſo the Electuaryes and Candyes, mentioned in Heart-pain.

Or this: Take *Conſerve of Quinces two ounces, Citron peels candied, Conſerve of Roſes, each one ounce; Conſerve of Sorrel half an ounce, Roſe, Sorrel and Coriander ſeeds, each half a dram; red Coral one dram, with Trionſantalon, or Diamargariton frigidum.* If they ſwound, Narcoticks, Antidotes, mentioned there alſo, by taking away ſenſe from the Stomach, ſtay Vomiting by themſelves, or with other things.

You muſt apply ſtrengtheners to the Stomach, before and behind, temperate, or ſomwhat cool, but actually hot, becauſe the Stomach is quickly offended with Cold: therefore we mix cold things with hot. Theſe are alwayes good in Fluxes, eſpecially when there is a loathing of meat, being of ſweet ſcent.

Oyls relaxe actually, therefore are not to be uſed alone, but with cold Aſtringents, adding ſome that are hot, as in Heart-pain. Vinegar, as there ſaid, is good, but in a greater quantity, or with other four Juyces, and aſtringent Pouders that are ſweet.

Or this which is more binding. Take *Maſtick two drams, Frankincenſe, Cypreſs roots, Pomegranate flowers, each one dram; dryed Wormwood and Spike, each half a dram*: make a Pouder.

The cooling ſtrengthning Oyntment, mentioned in Heart-pain alſo, or this which is more binding. Take *Oyl of Maſtick, Quinces, Roſes, Omphacine, each one ounce; Oyl of Myrtles ſix drams, Oyl of Wormwood half an ounce, Vinegar of Roſes, old white Wine, each one ounce and an half; Juyce of Quinces, or Pears, or of Citrons, and Lemmons one ounce*, boyl them to the conſuming of Juyces, then add *Pouder of Maſtick, Olibanum, each one dram; Bole one dram and an half, Acacia, or Hypociſtis, or Juyce of Sloes, each one dram; Galls, Pomegranate flowers, red Roſes, each half a dram; with Wax* make an Oyntment.

Or an Emplaſter, adding to the aforeſaid doubled in weight, *Dragons blood two drams, Acorn-cupps, Cypreſſi-nuts, Citron peels, Bramble leaves, Myrtles, Wormwood, Mints, Myrtle ſeeds, Coriander, each one dram; Aniſpodium one dram and an half, Spikenard, Nutmeg, each half a dram; red Sanders one dram, Gallia Moſchata two ſcruples, with Pitch, Roſin, and Oyls aforeſaid*, make a Plaiſter.

Pouder of Maſtick with the White of an Eg, and ſome of the Oyls aforeſaid is good, if it be applied as a plaiſter.

Roſe-cakes ſprinkled with Roſe-water, and Vinegar of Roſes, with red Wine, is excellent.

A Cruſt of Bread toaſted and ſteeped in Vinegar of Roſes, and then dryed, and tyed with a fine linnen-clout, that it may ſtick to the ſtomach, is a good and eaſie remedy. on which you may ſprinkle Maſtick, Cloves, and the like.

Or

Or you may wet the Toſt in Juyce of Quinces, or of four Grapes, or the like aſtringents, or red Wine; or apply the Juyces with Bran, or Barley-meal, . Theſe will be ſtronger, with the Pouder of Maſtick, Wormwood, Mints, Roſes; or boyl the Plants, in red wine, and beat them with Bread, and other Aſtringents, mentioned in the Emplaſters.

The Compound Plaiſter of the Cruſt of Bread, with Oyls is made of the Cruſt of Bread, toaſted and ſteeped in Vinegar, *with Barley-meal, each two ounces; Oyl of Quinces and Maſtick, each one ounce; Maſtick, Aniſſodium, Coral, red Sanders, Mints, each one dram.* To which you may ad *Wormwood, and other Aſtringents.*

The Emplaſter made of Dates by *Alexander*, with Bread, Quinces, Vinegar, Oyl, and many Aſtringents, is alſo good to ſtay vomiting.

Or that made of Pulps; thus: Take *Quinces, or Pears, or four Apples that ſmell ſweet, or the like, bake them if they be green, if they be old, boyl them in red Wine, with Vinegar, beat them, and apply them.* Add *Oyl of Mints, and Wormwood which are good by themſelves, and keep the other from drying, and from being too tough.*

An Epithem *of Roſe-water four ounces, Vinegar of Roſes two ounces*, applied hot with a red Cloath, *with two drams of Maſtick, one dram of red Sanders, red Roſes and Cloves, each half a dram; and ſome grains of Camphire.* Alſo a Clout dipp'd in Juyce of Quinces, Pears, or ſharp Apples, with Juyce of Citrons, Lemmons, Pomegranates, and applied hot with the Pouders mentioned.

An aſtringent Fomentation is made of the Decoction of Wood and Leaves of Pears, Quinces, Oak Services, Barberries, Privet, Olive, Medlars, Sumach, Myrtles, Brambles, Roſes, wild Vine, Pomegranate flowers and peels, and Galls, with Wormwood, and Mints, Coriander ſeeds, and Myrtles, and Sanders, with Spices, in red wine alone, or with water, or in Iron-water.

Cupping-glaſſes fixed to the Stomach, or at the bottom thereof, ſtoppeth vomiting. And if done while the Patient is eating, he will not vomit it up. But if Choler be carried from the Meſeraicks to the Stomach, you muſt apply the Cupping-glaſs to the Liver or Spleen, where the great veins are, or a Dropax, or ſticking Plaiſter of Pitch diſſolved in Oyl, laid to the Stomach, and violently drawn off, doth ſtop vomiting.

Ligatures alſo, and Frictions of the extream parts, and ſprinkling of the Face with cold water. Let him ſmell and eat things pleaſant to the Stomach, as Apples, Pears, Quinces, and other things mentioned for the keeping down of a Potion, or put his Hands in cold water.

A broad Plate of Ivory laid to the Stomach, is reported to ſtop vomiting.

Alſo a Jaſper-ſtone hung about the Neck to touch the Stomach.

As for Diet. Let his meat be little, and often of good Juyce, pleaſant, not loathſom, rather thick then thin, with Sauces aforeſaid.

Bread of Wheat or Barley, with Juyce of Pomegranates, or with Roſe-water, Roſe-vinegar, and Sugar is proper.

And Gelly of Capon-juyce, boyled between two diſhes, with Juyce of Citrons, and other Cordials, when ſwounding feared.

Let the Drink be actually cold rather then hot. Let the wine be ſharp, or if they love not wine, let them drink water boyled with Coriander ſeed, or water with ſharp Syrups, with a regard of Nature and cuſtom.

Cold water drunk after meal, doth the ſame.

They commend the drinking of Spaw-waters, for them that are ſubject to vomiting, not only for to ſtay it, but to cure the Cachexy from thence. Alſo ſharp Drinks.

Let them reſt, and ſpeak little, and not move the mouth with chewing.

Sleep is profitable, becauſe it ſtoppeth Fluxes, and to provoke it, you muſt give Domitives.

We cure the accidents of Choler as we cure choler, as the Flux of the Belly, with outward things that ſtop vomiting.

Alſo Thirſt, with ſharp Drinks. The Feaver with things that void Choler. The Convulſion which is preſent, or at hand, with Oyntments to the Back, and the like, mentioned in the Cure of Convulſion. Faintneſs or Swounding we cure with cordials, and good victuals. Or if there be heat of urin, or the like, let medicines be ſought for in their proper places.

The Cure of Vomiting of Blood.

If Blood be vomited, and ſticks clottered in the mouth, then you muſt provoke vomiting, rather then ſtop it, leaſt other Symptoms be produced. If blood come from the Meſeraicks, it ſhews the danger, and greatneſs of the Diſeaſe, and then the Diſeaſe muſt be chiefly looked at. If it come from the hurt of the Stomach, or any part adjacent it is very dangerous, and the remedies muſt be applied to the wound, or contuſion. In every cauſe, when blood is vomited in great quantity, you muſt rather hinder the flux of blood into the Stomach, then ſtop the vomiting, with inward and outward means. And you muſt hinder the Flux, with things that diſſolve congealed Blood in the ſtomach, which cauſeth dangerous accidents. Thus,

Blood-letting can draw but little from the Meſeraicks, which fill the Stomach and Guts with Blood: Yet in Plethory or Fulneſs, when the cauſe requires it, you may open a proper vein. And if the Terms be ſtopp'd, open that in the Foot.

Revulſion of this Blood-vomiting, is alſo made with Cupping-glaſſes to the Hypochondria under the Ribbs, in the Belly, below the Stomach, or to the Hipps, when the Terms are ſtopp'd.

Alſo with Ligatures and Frictions of the extream parts, eſpecially of the Thighs.

Purge not, except the Diſeaſe do require it, and then not with ſtrong medicines. But with a little Rhubarb, to take away the congealed blood, which will bind alſo afterwards, or with Syrup of Roſes.

Alſo if blood be voided by vomit and ſtool, congealed and black, give Clyſters to cleanſe, and ſtop the mouths of the veins, ſuch as are for a Dyſentery. And when clots of blood ſtick in the Guts, Water and Vinegar will diſſolve them.

Let him eat Pap of Starch, Rice, Barley flowers, Gelly, and Milk.

The White of an Eg, and Mucilage of Quince ſeeds, and Gum Traganth extracted with Roſe-water, or Plantane, well beaten, may be given alone, or with Sugar pellets, or Sugar of Roſes, or with red Wine, or Vinegar of Roſes.

Or make a Syrup of the Juyces mentioned, boyling them with Sugar; *or of the Herbs with one pugil of red Roſes, Pomegranate flowers half an ounce, red Sanders one dram*, boyl them *in Iron-water, with Vinegar and Sugar, to a Syrup.*

The uſual Syrups are good, as of Myrtles, Quinces, dry-Roſes, Bar-berries, of unripe Grapes, of Plantane-water alſo drunk, or Water of Nuts to diſſolve blood.

Let him drink *ſteeled Water, with one ounce of Maſtick, white Coral half an ounce, Cryſtal, or Jaſper two drams, or Vinegar and Water.*

A Pouder. Take *Bloodſtone two drams, red Coral one dram and an half, Bole, Acacia, each one dram; Gum Arabick, or Traganth parched, half a dram*, make the Pouder, add *the Roots of Snakeweed, Pomegranate flowers, Horſtayl, each half a dram; of Henbane ſeeds: let him take one dram, with Wine alone, or with a little Water and Sugar two drams, or make Lozenges thereof with Sugar, boyled in Plantane-water.*

To diſſolve clotted Blood, give Amber, true bitumen, Mummy, or the Runnet of a Kid, &c.

The Pouders uſual, are of the Troches of Amber, of Lemnos Earth, which both ſtop blood, and by reaſon of the Amber, diſſolve it when congealed. Alſo the Troches

of

of Antispodium, with Sorrel seed. These are better, because of the Poppey therein.

A good Electuary. Take *Conserve of Comfrey roots, and old Roses, and Quinces, each one ounce; Troches of Amber, or Lemnos Earth, or the Powder mentioned two drams,* and if he be faint, *the Powder of Diamargariton frigidum, or of Gemms half a dram, with Syrup of Quinces,* make *an Electuary, or with Sugar, Lozenges, give as much as a Chestnut,* and let him drink after it some distilled Water that is proper.

One dram of Philonium Persicum is highly commended, to which you may add *half a dram of Rhubarb,* to dissolve the congealed Blood.

Outwardly the Fomentation and Epithem described in Vomiting of Choler are good, as also the Oyntments and Plaisters there.

Or these: Take *Oyl of Myrtles, and Quinces, each two ounces and an half; Juyce of Plantane, or the like, one ounce and an half, Vinegar of Roses one ounce,* boyl them till the Juyce is consumed, add *Acacia, and Hypocistis, each one dram,* make an Oyntment, or add *Mastick half an ounce, Bole two drams, Pomegranate flowers and peels, Galls and Sumach, each one dram; with Wax* make a Cerot, *or with Rosin* an Emplaster.

CHAP. X.

Of Pissing.

The Kinds,

Preternatural Pissing. THat Pissing by which the Urin in Males, passeth through the Yard; in Women through their pissing place is Natural. But when it is involuntary, or immoderate, or often, or little, or thick, or bloody; or cometh by a wrong passage, it is preternatural.

Involuntary Pissing. When the Urin flows out of its own accord, without the Will of the Patient, it is involuntary. And this is somtimes without Feeling, as in Apoplexies, Palsies, and Swoundings. And some who have been cut for the stone have it for ever.

Pissing of Bed. There is another involuntary Pissing, which they have who pis their Beds, especially Infants, if it be a fault in them: It is unseemly in young people that know it, and ought to avoid it. But worse when they come to years.

Immoderate Pissing. It is called immoderate, when it is too much, too often, or unseasonable, as in Drunkards. They fill themselves with wine and rise from meat to pis. This is thought unseemly among people of reputation, which hold Drunkenness for a great shame, as indeed it is.

There is another immoderate Pissing, when it is not after large Drinking, but ofner then it ought to be: For which cause they cannot tary long in Assemblies, but are forced to go forth, and pis.

But that is chiefly immoderate Pissing, when they pis more then they drink or eat of moist meats. This is in sound Folkes, which are called *Vritici* without another infirmity. And in sick in the Grisis or Declination of a disease. And because it is profitable, and not hurtful, it is not preternatural, except it continue to the los of strength, which will eatily decay by such an Evacuation.

Diabetes Dipsacus. There is another in the Disease, called *Diabetes* but seldom, which is a large and immoderate Pissing, when what is drunk is little or nothing changed, with an unquenchable thirst from whence it is called *Dipsacus*, when the Body is hot and consumeth.

Dropping of urin. *Strangury.* There is another, often and little Pissing, when the Urin is voided by drops, called *Strangury*, which is somtimes without pain: Of which we spake in the want of Pissing.

Hot Pissing, scalding Urin, Dysury, or difficulty of urin. There is often a burning pain in pissing, called scalding Urin, or Dysury, though this word is more proper to pissing with difficulty or pain, as Dysentery is in the Guts, then to little Pissing. In this Disease while the Urin drops, there is pain: but when it comes more freely, it begins at the Conclusion. And continueth a little after, and begins again before the next Pissing, causing such a straining, that it produceth horror and sweat. A grievous pain in Males about the end of the Yard or Glans, which is then touched; hence the Germans call this, cold Pissing, though it be hot. Women are pained also in the passage for Urin.

This Dysurie or Difficulty of Pissing troubles young and old, somtimes without other Diseases, and is short, if it come from the taking of any thing, or from some cause that continueth not, as we shall shew. Somtimes it is longer in which there are some signs of a foul Body.

Somtimes it is with other Diseases, as in thick Pissing, when it is mattery, sliny, or like Milk with Urin, for the Diseases of the Reins, Bladder, or other parts: Also in the Ulcer of the Yard, and Bladder, matter is voided alone; and Seed involuntary in a Gonorrhœa, or Running of the Reins, especially when it is venemous: As we shall shew concerning them.

Somtimes symptoms of the Stone in the Bladder, are with this Dysury, as Itching about the Privities, standing of the Yard, sense of Heavines about the Fundament, into which, if the Finger be thrust, the Stone in the Bladder may be felt; also straining with crude Urin, sometimes thick and bloody, and sometimes it is quite stopped.

Thick Pissing. There is often turbulent or thick pissing as of matter which settles in the urinal like a Pultis, and mixeth again with the urin when it is shaked, and goes to the bottom again when it settleth. It is somtimes white, without scent, somtimes stinking, somtimes white Filmes do fly in the Urin, as in the Ulcer of the Kidneys: As we shall shew. Somtimes it is without scalding, but with heavines, and pain of the Reins, somtimes with scalding.

They say that pissing of Matter may be from an Imposthum in the Liver which is rare, and from a Pleurisie, or Peripneumony, or Empyema, which is most rare and seldom.

There is another thick Pissing of Slime with the Urin, which sticks to the bottom of the Urinal, like Glew after the Urin is poudered out, this is from the Ulcer of the Bladder, and then there is also scalding of Urin. Also this slime is voided alone: As we shall declare in the Excretions of the Yard without Urin.

Milkie Pissing. Another thick Pissing is like Milk, and then there is a great white sediment at the bottom of the Urinal, and is mixed with the urin when it is shaked. I have observed this in my self and others, somtimes for many daies, and somtimes at certain hours, especially at night, after Exercise without other accident, except heat in Pissing and straining after.

Pissing of blood. Pissing of Blood, is when the Urin is coloured like blood. In which after settling there is a thick and black sediment.

This is often with other accidents in the Stone of the Kidneys, and after violent Exercise; also in the Stone of the Bladder. And if there be an Ulcer, there is Matter with Blood.

They who use the Catheter have often a little blood in the Urin. And they who have had a great Fall or Stroak pis blood.

And they who have taken Cantharides, or Spanish flies, or the like.

Other-

Otherwise there is seldom Pissing of Blood. Only in Feavers it may be a Crisis, or for Judgment: And I knew a Maid in a pestilential Feaver, that pissed some chamber-pots full of blood before she dyed.

Also Blood hath been pissed without a Disease: As we shall shew in the Causes of all sorts of Pissing Blood.

Urin of a preternatural color or mixed.

There are also other kinds of preternatural Pissing. As when the Urin is of another strange colour, mixed with sand, slime, which shew Diseases, or the approaching of them. Of these we shal not speak, because when the Disease is cured, they vanish.

Urin mixed with dung, bones, or the terms.

Here may be mentioned Urin with dung, as we shewed in the preternatural Voiding of Excrements of the Belly, or with bones, or the like, which we spake of in preternatural Excretion. Or with the Terms, as we shewed in their preternatural Flux.

The Flux of urin by a Wound.

Somtimes the Urin flows another way, as out of a Wonnd, as in cutting for the Stone, it flows at the Perinæum, till it be healed. The same may be about the loins and lower parts of the Belly, from a wound there: As we knew one who made no Urin, but at his Groins for many years.

The Causes.

The Cause of all preternatural Pissing, as involuntary, immoderate, often, little, thick, bloody, dyed, or mixed, is from an evil custom, or Disease in the Reins or Bladder, as a hot Constitution or weak, a cold or hot Distemper; or forcing, or solution of continuity or contiguity: Or from a Disease by consent of the Bladder. Or some Disease in a part like the Reins and Bladder.

An evil custom is the Cause of often Pissing.

Somtimes often pissing is from an evil custom; for when Nature is not disordered by Diet, she keepeth her order and time for voiding the Excrements of the belly: And if you disorder her by any means or forcing, it will not be seasonable. Therefore Infants that have long pissed their beds, are familarly troubled therewith, an it continues with them, when grown up, which is unseemly.

The Constitution of the Reins and Bladder.

Some kinds of Pissings come from the Constitution of the Reins and Bladder. As when there is exquisite sense in the bladder, which being pricked by the urin, sends it forth before the time. And this may be the cause why Children pis a bed, except they be raised at night. And if to this exquisite sense, there be a sharpness of Urin, it will be rendered oftner, and sooner scaul'd, as shal be shewed.

Heat and weakness of the Kidneys, is the cause of often Pissing.

A Natural Heat of the Kidneys, may cause more, and oftner Pissing, because heat makes a sooner separation. As also weakness, when the retentive Faculty cannot retain the Urin long enough.

This is often from the Birth, through want of heat, or from the loosness and softness of the Vessels, or from much drinking: Or from immoderate Venery, which weakens these parts.

When the Bladder is weak, loose, or soft, there is often Pissing. Or when it is over-stretched, and too thin, which is from the birth in some, or from long retention of Urin, in Assemblies.

Also strong Imaginations in a Dream, may cause this, when they dream they pis's in a convenient place, which stirres up the expulsive Faculty.

A cold Distemper of the Reins, is the Cause of often Pissing.

When the retentive Faculty is weakned by a cold distemper in the reins and bladder, there is often Pissing: this is from external cold, so cold at the Feet by consent of these parts, may cause Pissing.

Many think that *Diabetes* comes from a hot distemper; but the Reins are many times hot without that distemper: And if the Reins were very much inflamed, pissing would not be increased, but diminished, or suppressed, and the attractive vertue rather destroyed then increased. Moreover though there be Thirst and Consumption, with the Diabetes, or often Pissing, yet it is not proved to come from the heat of the reins. Because thirst may come from want of moisture, through continual pissing. And the heat of the whole Body cannot be kindled, only from the heat of the Reins, without an Inflammation, whence pissing will be diminished: neither can the Body be consumed thereby. Therefore there is another cause of Diabetes, which is seldom seen. We freely grant that pissing may be hastned from a hot distemper of the Reins, if there be much water: As we shewed it might be in the hot Constitution of the Reins, but we deny that this confused and unusual pissing can come from heat thereof.

A hot Distemper in the Kidneys, is the Cause of scalding Urin.

But scalding Urin comes from the heat of the Reins, or is increased thereby: As we shewed in the Inflammation of the Reins, in which the Urin is made hot. And this may come from a simple distemper without Inflammation, but the Urin is sharp and hot, first from other Causes, and thenis farther inflamed by the Reins.

Pricking in the Reins and Bladder, is the cause of preternatural Pissing.

From the pricking of the Reins and bladder, there are divers kinds of preternatural Pissing. And it is caused by Urin, by Matter, by Seed, or by a Stone.

Much Urine, is the cause of large Pissing.

There is a large Pissing from too much Urin that pricketh the bladder. And that is from the use of watery things, and drinking much.

Too much drink is the Cause of immoderate Pissing.

From great Drinking, it happens that the Drink is little changed, but passeth through the veins to the Reins, and so to the Bladder. When the Drink taken is so much, that it cannot stay to be changed and mixed with Humors, but passeth through unconcocted.

Plenty of Water, is the Cause of immoderate Pissing, and Diabetes.

An immoderate Pissing may be when a great quantity of water, which lay in the veins, is suddenly sent this way. As in many superfluities of the Body: and in some Diseases, as in Cachexy or Dropsie, and the like, especially in continual Feavers, in which the cause of the disease is expelled by urin in a Crisis: Or when an intermitting Feaver declineth.

There is also a large pissing after a long suppression of urine by a Stone, or slimy Matter in the Vreters. As I observed two years since in a Preacher, who made no urin in eleven dayes, by reason of the Stone, and slime in the Ureters, and was in a miserable condition: But in one night on a sudden the Vreters opened, and he voided eight measures of water concontaining every one three pints, with great refreshment to his whole Body.

But if this Evacuation be too much, and nature sending forth the Cause of the Disease, be so profuse, that all the moisture begins to be voided, there will follow a Diabetes. Thence comes the heat of the whol Body, and thirst, especially, if there be a Feaver; and Leanness, especially if the Feaver be consumptive. And because in Feavers this pissing is seldom seen, only in a Crisis, when the Feaver

ver is cured thereby. Diabetes is a rare Disease, which weakneth exceedingly. Nor is it a wonder, when the urin passeth through so quick, that it is crude and not coloured. And this is the cause of a Diabetes, and not the hot distemper of the Kidneys, from which alone it cannot proceed. And though the practical Physitians did not plainly mention a Feaver in the Cause of a Diabetes, yet in their Prognosticks, if it be joyned with a Feaver they pronounce it deadly, and prescribe cool Remedies. We suppose that a true Diabetes in which there is sudden melting of the Body with heat and thirst, is an accident of a burning Feaver, and gives some occasion also of the melting; and therefore it is a Symptom joyned therewith, as the Feaver is also, except there be a Diabetes without a Feaver, by reason of abundance of drink, long kept in the Meseraicks, (for it cannot stay so long in the Stomach and Guts) and after thrust by Nature to the Reins, rather then attracted. Hence the drink is as it was drunk, and not altered in the first Concoction which it escapeth. And if there be then heat of the Body or thirst, these come from great emptyness, and not from the heat of the Kidneys which cannot do these things, or so weaken the body, as I shewed. But in regard drink is seldom so contained in the veins. This Diabetes is very seldom seen.

Sharpness of urin the Cause of scalding Piss.

There is a scalding Pissing with a Strangury from the quality of the Urin, provoking and pricking the Bladder to render it. And if it be sharper then it is by Nature, by which it naturally provokes the bladder to let it out, presently after it comes to the bladder, though in little quantity, it provokes it to get out, especially when the bladder is very sensible, hence it falls often by drops, and being in a narrow passage that is very sensible, it pricks, and causeth this heat and pain in Pissing.

This is especially in the top of the Yard, because when sharp Urin comes into the neck of the bladder which is narrow, and into the Yard, it causeth pain there by scalding. And this is felt chiefly in the Head or Glands which is most sensible. And because through great pain the Yard hangs down, and grows loose for want of blood and Spirits: It turns cold and pale. And this pricking is when the urin is too hot and inflamed; or when it is corroding, or too salt: or too sour, by which means it doth not only prick, but bind the passage.

Sharpness of urin is the cause of pissing.

From this provoking or pricking of urin, there is a bloody pissing also, when it is corroding to the bladder.

The Urin takes these qualities by which it causeth scalding and bloody pissing, from things taken into the Body, sometimes mixed with Humors and Excrements.

As from Diet, as too much Wine and Spices, and hot Oyls, of Water-cresses, Onions, and Mustard. It receives saltness from salt Meats, sourness from sour things, especially sour wine, as hath been experienced, and a cleansing quality from the things mentioned, and other abstersives. Among which is beer which makes the urin sharp in them that are not used to it. The same may be from Medicines, and from hot Purges, as Spurge, and Coloquintida which provoketh urin, as stools by their sharpness. Also Cantharids inflames the urin, and such things cause pissing of blood, and ulcers in the Yard. And it appears that Spanish-flies do it by heat, because outwardly they raise Blisters. The Urin may take the same qualities from the mixture of Humors, as of Choler, it may take heat, sharpness, and cleansing, when it is preternatural and burning; for Natural Choler in the Gall mixed with water, cannot make the urin so sharp, as it is in the Jaundies, though the water be dyed with Choler, yet the urin is not scalding. There are divers Causes of this choler, both in Diseases, and without; of which heat of urin is a symptom. The cause of this Choler mixing with the Serum, and so with the Urin, is mentioned in other Diseases. And if the Serum be salt and sour from other humors, the urin will be such.

Pricking comming from other matter mixed with the urin, may be the cause of Scalding or Dysury. As from the matter which comes from Ulcers in the Reins, and other corruption in foul Bodies ripened by the heat of the Reins. These may cause burning, and matterry urin together. Matter without Ulceration, causeth foul Urin without other accident, except heavyness in the Reins.

Corrupt Urin from matter like milk, is like the former, except the colour, when there is also heat, which though it come from the Reins, as the other, is more salt, as appears when it is dry, being like white salt in colour and tast: And I collect that it comes from the saltness of the Serum in the Reins made thick and concocted, because when it is more hard, it turns to sand, or a stone, as we shewed in the Stone.

Seed out of its place, is the Cause of scalding Urin.

From Seed in Men, moved from its place, and not sent forth, pricking and burning, may come scalding urin, for seed by Nature is sharp, and in its one place it doth no hurt, as Choler in the Gall, but going forth, and sticking in the passage, it corrodes and exulcerates which causeth heat of urin. As it is in them who have nocturnal Imaginations or diurnal Lusts, which stirs up the Seed, without action or spending. This is in old men from the little quantity of seed, and insufficient extension of the Yard, and in sick people, and causeth scalding Urin.

Corrupt Seed is the Cause of scalding urin in the Running of the Reins.

In a venemous Gonorrhœa the same happens from corrupt Seed, so that it runs not only from the sharpness, but also corrodeth the passage, especially when any part sticks by the way, and causeth scalding Urin.

A Stone in the bladder, is the cause of hot urin.

There is a dropping of Urin with pain, and desiring to piss, from a stone in the neck of the bladder which pricketh, and if it be great, is burdensom. These Stones fall first from the Kidneys by the Ureters into the Bladder, and there being kept, they increase dayly by the Urin which washeth them: As we shewed in the Causes of the Stone of the Kidneys. And in Hypochondriack Pains, where we shewed how sand and stones, which are the causes of preternatural Pissing, grow in the Kidneys, and sometimes in the Liver.

The Solution of Continuity in the Kidneys & Bladder, is the cause of Pissing of Blood.

There comes Pissing of Blood from the Solution of Continuity in the Reins and Bladder, when the substance of the Reins is wounded or bruised. But usually from a Stone in the Kidneys, which rubbs and chaffs them till they bleed; which blood is mixed with water, and pissed forth, and separateth from the urin to the bottom when it is settled: But if the urin be too long in the bladder, then it is so mixed with blood, that it will not be separated. This also happens when a stone moved from its place, cannot get forth, but by forcing a passage, bruiseth the Reins with its hardness or unevenness; or when it is forced by external motion through the pressing of the Reins, by which means the Hypochondria are also troubled, and so causeth bleeding within, which blood being rendered with the urin, signifieth the stone in the Reins, especially if there be other signs therewith. And if there be an Ulcer in the Kidneys therewith, the Stone by chaffing it, causeth it to void not only matter, but blood.

A Stroak in the Bladder, or a Wound piercing to it, may cause bloody Urin, or a touch with a Catheter, which is an Instrument to let out urin. Also a stone striving to pass the neck of the bladder, may cause bloody urin; and then onely some few drops come after the urin is made with great pain. And this is one of the infaillible signs of the Stone.

When

A Wound upon the Sphincter muscle of the bladder, is the cause of involuntary Pissings.

When the SphincterMuscle which is the Cause of the stopping of the Urin is wounded, there is involuntary Pissing, as is usual in cutting for the Stone, and though the wound be cured, yet by reason of the hurt of the Muscle, the urin cannot be contained.

A Wound in the bladder, is the cause of urin pissing that way.

Somtimes there is a preternatural flux of the urin from a wound of the bladder, not only by the cutting for the stone, but by other external means: As when there is an Incision made for a fleshy rupture in the Groin, as I shewed in the want of Pissing, how one alwayes pissed that way. And we saw one that gored with an Ox whose horn pierced through his bladder that voided urin at both Orifices.

And this may be from any other Wound in the Bladder.

An Ulcer in the Reins, is the cause of pissing matter.

From an Ulcer in the Kidneys followeth a pissing of Matter with urin, which settleth at the bottom, which causeth pain in pissing, if it be sharp, with other accidents. The cause of the Ulcer is an Inflammation.

Those Causes of Solution of Continuity in the substance of the Reins mentioned, may cause pissing of blood, if the wound be not cured, but turn'd to an Ulcer.

The Ulcer of the bladder, is the cause of pissing hot matter.

When there is a wound in the neck or bottom of the bladder, there is pissing of Matter, with Urin, and somtimes without, where the wound is in that part of the neck which is farther from the bladder. This matter makes the urin stink. Or is pressed with difficulty, and sticks to the bottom of the chamber-pot. And then there is hot pissing, because the ulcer is disturbed, and then the matter is sharp. This Ulcer comes from a wound.

Hurt of the neck of the bladder is the cause of pissing of dung, bones, or terms.

That strange pissing of the Dung and Bones mentioned, comes from an Ulcer in the neck of the bladder. This Ulcer comes from a Wound in the neck of the womb, or strait Gut, which eats into the bladder. And hence womens terms are mixed with Urin.

The Anastomosis, or Diapedesis of the Veins of the Reins, is the cause of pissing of blood.

Somtimes Blood is pissed from solution of contiguity by Anastomosis or Diapedesis of the Vessels; when through plenty of blood, or foulness thereof, in Plethory or Diseases from thence, Nature purgeth blood from the emulgent veins, into the Reins, and from thence by the Ureters into the Bladder. And then the blood is voided without pain, or other distemper. And as I shewed, Feavers have been cured thereby, but seldom. And it is probable in the wench that had the plague, and pissed blood before she died, that Nature was stirred up by the force of the venom, to throw it out that wayes, which it could not compleat.

The thinness of the blood, is the Cause of the Anastomosis or Diapedesis of the Vessels of the Reins, which causeth pissing of blood. By which means before the blood is separated from the Serum in the Kidneys, Guts, through the Vessels into the Bladder, and causeth, blood with urin, more mixed then when it is carried to the bladder alone.

Loosness of the Vessels, is the cause of pissing blood.

The next Cause of pissing blood, is the weakness and loosness of the Reins, and then there is often pissing also.

There is also involuntary pissing from a Disease by consent, as when the bladder is hurt, and the Muscles suffer also.

Want of animal or vital Spirits is the Cause of involuntary pissing.

The Sphincter Muscle suffer from the want of Animal Spirits, for then being relaxed, they cannot contain the Urin. This want of Spirit is from a distemper of that Nerve which moveth the Sphincter Muscle, either alone, or with all the rest in a Palsie. Therefore some men in Palsies and Apoplexies piss involuntarily.

In a Swounding, when there is a total privation of vital spirits, so that all the Functions rest, the sphincter muscle being idle, the Urin flows forth.

A Convulsion of the Muscles of the belly, is the cause of involuntary pissing.

The same is in the Convulsion of the Muscles of the Belly, when the Urin is driven out of the Bladder by constriction or straitness of the Muscles, and pressing of the belly, and if the sphincter be also strained, it cannot stop the veins.

An Impostum in the bowels, is the cause of pissing of matter.

Preternatural pissing comes also from other parts, as from an Impostum of the Liver turn'd to an Ulcer, the matter being mixed with the Serum, and there with the Urin. As also from the Lungs and Breast in a Pleurisie, Peripneumony, and Empyema. And if it may come from thence to the Ureters, then it may come from other parts internal being ulcerated; the matter may go back into the Vessels, and so be carried with the Serum into the Reins, and mixed with the Urin.

The diseases of the internal bowels may cause a tincture in the urin, and a mixture.

From Diseases in the Stomach, Liver, Spleen, and other parts, especially in Feavers, and from their distemper and humors; the urin may be discoloured, or mixed with other matter, and cause preternatural Pissing. As we shewed in those Diseases.

The Cure.

There are divers sorts of Cures for divers Pissings, as involuntary, immoderate, often, or hot pissing, thick, and bloody. Or when it passeth a wrong way.

The Cure of involuntary pissing from want of animal or vital Spirits.

If involuntary pissing comes from a Palsie, or want of strength, or the like, you must cure it as the Apoplexy, Palsie, or Swounding. Apply medicines to the Back, and Loins, and to the Fundament, where the neck of the bladder is; such as were mentioned in the Palsie.

If involuntary Pissing come after a wound in the Muscle of the bladder, or when it is torn for the taking out of the Stone, it is incurable ordinarily. But you must use such things for the allaying of the urin, and binding the passages, as are mentioned in immoderate pissing.

The Cure of pissing a bed.

That involuntary pissing in the sleep, when young Children, and others piss their beds, must be cured by preventing an evil custom; by pissing before they sleep, and by being raised at midnight to piss, till Nature is brought to another custom. And this is the best Cure, especially if you take away the Causes which provoke urin, as large drinking, especially at bed-time.

But if it come from weakness, or too much sense in the bladder, then you may use things to abate the sharpness, and make it thick, and bind, and a little stupefie: As shall be shewed in immoderate Pissing.

These following are good by propriety, boyled, or roasted, as a Hedg-hog, Mice, Lungs of a Kid, the Brain and Stones of Hare, or Fox, the brain of a Vultur, or Eagle, and Fat of a Partridg.

Also the Pouders of these following, or the Ashes, as the pouder or ashes of an Hedg-hog, a Hares head, with the skin burnt, the Bladders of an Ox, Hog, Goat, Sheep, and

and Swimms of Fishes, the inward skins of Hens Gizards, Cocks necks, Geese tongues.

It is good against Pissing of bed to put the Yard into a dryed Bladder, or the like; others use a Spunge, but the bed will be wet, notwithstanding that.

The Cure of involuntary Pissing from the distemper of the Reins, immoderate pissing.

Immoderate Pissing, when it is too much or too often; if it come from an evil custom of pissing often, let them not piss at every motion. And that will bring Nature into order.

When it is from the exquisite sense of the bladder, then keep the urin from being too sharp, and if it continue, abate the sense with remedies mentioned in hot Pissing, yet not so strong, because this is not so considerable.

If too much Urin be made by reason of a hot Constitution, because it doth little hurt, let them only take heed of hot meats and drinks, and use temperate things that cool.

That often pissing which comes from weakness or want of Natural heat, or loosness of vessels, or enlarging, or making the bladder thin, if it come from the Birth, is hard to be cured, but if from much drinking, and long holding of the water, then take away the Causes, as also when it is from too much Venery, which weakneth the Reins.

But if being old, it will not so be cured, in regard there are worse accidents begin first with them.

If often pissing come from a cold distemper of the reins and bladder, chiefly from the cold of the Feet, it is but of short continuance, and not regarded. But if the cold distemper remain in the parts, these hot remedies mentioned in the Pallie of the Bladder are to be used, as also when there is weakness from that Cold.

The Cure of much pissing after much Wine.

If much pissing be from much wine, because it is good, there is no other course to be taken, to prevent rising from the table, or pissing Breeches or Bed, but to avoid drunkenness, and use the remedies against pissing a bed.

The Cure of much pissing from abundance of Serum.

When much pissing comes from abundance of Serum or Whey in the veins, it is necessary, and good in sound men to prevent, and in Dropsies and achexies to cure the Diseases, except it be immoderate.

But if from the sudden Evacuation, the strength is abated, it may be hurtful, as in the tapping for a Dropsie, if much water be taken out at once, so here though the way be Natural, yet the Flux being great and sudden may be dangerous.

This immoderate pissing in Feavers, when Nature expel the cause, in a Crisis of a continual Feaver, and in the declination of an intermitting, is good to cure the Feaver. But if be too much, and too long, and the matter not concocted without a Crisis, because then the Cause of a Disease is not abated, nor the Patient refreshed thereby, but weaker, thirst increased, and the body withered, there follows the deadly Diabetes. But when the cause of the disease is taken away by pissing, you must not stop it.

The Cure of Diabetes.

In other violent pissings that weaken, as in Diabetes which is seldom seen, which consumeth the body, and causeth thirst, you must speedily stop them; first hinder the increase of Serum, and then evacuate it otherwayes, after correct the thinness, heat, or sharpness, with things that thicken, cool, and asswage. Also stop and astringe the passages, and stupefie the sense of the bladder. As we shewed in hot Pissings: and use these following with respect to the Disease accompaying them. If the Disease hinder not, in full Bodies let blood.

Also give cooling, and gentle astringing Clysters, with the Decoction of Rhubarb, and Myrobalans, and stilled Waters of Roses, Plantane, with glutinating things, as whites of Eggs, Mucilage of Fleabane, Quinces, or Infusion of Gum Traganth in proper Water.

Let the Diet be sparing, only that which will keep the strength: Let them beware of sour things, salt, sharp, burning, and hot Spices, all which provoke urin.

Let them rest, and not heat the Reins by lying upon their backs.

Purges to derive the Whey and Serum from the Veins to the Guts, and so to hinder the plenty of urin, are good, because when men purge they piss little; and often pissing in sound men doth signifie the need of purging: and in Diseases it shews that the Body is not sufficiently purged.

These must be gentle, if the strength abate, and astringent with Rhubarb, Myrtles, Citrons, Syrup of the Infusion of Roses, with other astringent Syrups, Decoctions, or Waters, as in the Dysentery.

Sweating is good to send the serum through the Habit of the Body, and derive it from the Veins, and so to abate Urin. And it must be provoked betimes, when we fear too much pissing, before the strength be abated.

There are divers Drinks that thicken, bind and cool, and heating Meats, as Bread, Pulse of Wheat, Starch, Groats of Barley hulled, as Ptisans of Rice, Almonds, divers wayes prepared; Lentils boyled, Almonds, Nuts, roasted Chesnuts; also gross and clammy Flesh, Whites of Eggs, Lettice, Endive, Bugloss, Purslane.

Also Broaths of Corn and Flesh, Milk, steeled water, Emulsions of Almonds, thick binding Wine, with water of Myrtles, Bugloss, or the like.

Also Syrups of Myrtles, dryed red Roses, Juyce of Sorrel, and others that bind, and heat not.

Or this Decoction. Take *Comfrey roots, and of both Bugloss, each one ounce; Plantane leaves two handfuls, Cordial flowers one handful, dryed Pomegranate flowers, yellow Myrobalans, each half an ounce; Myrtle seeds one dram, Plantane, Dock, Purslane, and Sorrel seeds, each one dram*; boyl them *in six pints of red Wine*. Let him drink thereof.

Plantane and Shepheards-purse-water, and the like, if there be heat, are good.

Also candied Comfrey roots, Myrobalans, Quinces, Elicampane, old Conserve of Roses.

Also Mucilages of Fleabane, Quinces, Infusion of Gum Traganth in Rose or plantane water, given *half an ounce*, with Sugar or convenient Syrup.

Also pouders, with sugar of Roses, red Wine, or other Liquors.

That of Acorns only is excellent, or mixed with Lentils, husked and baked.

Or this: Take *Coriander seed two drams, Agrimony one dram, red Roses half a dram, red Sanders, Cinnamon, each one scruple, Spikenard half a scruple.*

With Acorn-cupps, Galls, Pomegranate flowers.

Or, Take *Frankincense, Amber, each one dram and an half; Myrrh two scruples, the Ashes of burnt Ox, or Hoggs, or of other domestick Creatures Bladders, half a dram*, make a Pouder.

Another. Take *yellow Myrobalans, Date stones burnt, each two drams; Bay-berries, Rose seeds, Pomegranate seeds, or of Myrtles, each one dram; plantane and purslane seed, red Roses, Gum Traganth, or Arabick, each half a dram; Acacia, and Dragons blood, each one scruple, with burnt Ivory, and Camphire*, make a pouder.

Or, Take *red Coral, and Bole, each one dram and an half; Bloodstone half a dram*: make a pouder, give it alone, or with the other the fourth part of this.

To these you may add pouders and ashes of living creatures, which have a propriety mentioned in involuntary pissing; and others, as wild Rue seeds and leaves, Mints, Calamints, Myrtles, Dates, Snakeweed, Tormentil, and Elicampane.

The Chymists in the Cure of Diabetes and Dysentery, extol the Essense of Crocus Martis according to *Crollius*, and the tincture of Smaragds, which *Hartman* commends, and shews how to prepare it in his Practice of Chymistry. And they also extol to admiration the tincture and salt of Coral.

If

If the Urin prick, give Stupefactives, as Syrup of Poppies, Philonium Perſicum which alſo bindeth, and the like. Treacle is commended againſt Diabetes, and they ſay it quenceth thirſt: which being hot, it cannot do, but it may help by its Narcotick Quality.

Externally apply Coolers to the Reins and Binders, as the Ointment mentioned in the Inflammation of the Reins and Liver, beginning thus: Take *Oyl of Roſes, Quinc.* to which you may add *Oyl of Violets, Water-lillies, Juyce of Lettice, Mints.* Alſo Oyl of Earth-worms which is thought to ſtop piſsing by a propriety. Alſo Seeds of plantane, purſlane, Camphire. Alſo the cooling Ointment there mentioned, and that of Roſes, the Cerot of Sanders, made of Oyl of Roſes, Sanders, Roſes, burnt Ivory, Bole, and Camphire.

The repelling Epithem mentioned in the Inflammation of the Reins and Liver, is alſo here good, and this of roſe-vinegar. And that mentioned which begins. Take *water of Nightſhade, and Lettice &c.* to theſe you may add *Sorrel, and Wormwood-water, with Bole and Spike.*

A Fomentation or Bath for the reins, is made of the decoction of plantane, Shepheards-purſe, Mullein, Violet-leaves, Mallows, Water-lillies, Vine leaves, Roſes, Pomegranate peels and flowers, Sumach, Bar-berries, Myrtles, Roſes &c. with Smiths-forge-water, or Iron-water.

You may make Cataplaſmes of the ſame, with Barley-meal, and the Oyls mentioned, and Earth-worms.

The Cure of ſcalding urin. If Heat of Urin come from Irritation in the neck of the bladder, or paſſage of the Yard, it is more eaſily cured, then when it comes from an Ulcer in the paſſage of the Yard. If it come from an Ulcer in the neck of the bladder, it is moſt difficult, becauſe the heat of the urin will not be gone, till the ulcer be cured, which is very ſeldom done. If it come from the Stone, it is not cured, till that is taken away. And if there be many cauſes together, and the heat comes both from the ulcer, and urin, it is worſe and worſe, when there is a ſtone there, which cannot be voided.

As for the Cure: we ſhall firſt ſpeak of ſcalding Urin from Irritation. And if there be an ulcer, becauſe then the urin is muddy; we ſhall treat of it in turbulent Piſsing: As alſo if it come from a Gonorrhæa, we ſhall ſpeak of it there. And laſtly we ſhall ſhew the Cure of it when it comes from the Stone.

The Cure of ſcalding piſſing from heat of urin only. If piſsing be hot from heat and ſharpneſs of Urin, from things taken, or from the mixture of humors, with the heat of the reins, it muſt be cured, by taking away the cauſe, correcting the heat and ſharpneſs of the urin: And by deffending the bladder and paſſage from the ſenſe of the pain. Theſe are done by internal and external remedies that cleanſe and alter.

If the Belly be bound, it muſt be looſned, becauſe ſtraining at ſtool cauſeth a preſsing of the paſſage of the urin and pain. Then we purge Choler or ſharp Humors with gentle means.

Caſsia is the beſt, which is alſo Anodine, and Diacaſsia, Diaprunis, Diabeſten.

This common Electuary doth looſen and leniſie. Take *Caſſia newly drawn two ounces, Manna one ounce and an half, Pulp of Sebeſtens, Tamarinds, or ſweet Prunes, each one ounce; Mucilage of Fleabane ſix drams, the four great cold Seeds half an ounce, Juyce of Liquoriſh one dram, with Syrup of Roſes ſolutive:* make an Electuary, give *one ounce* at a time.

We chiefly reſpect Choler in purging, and therefore ad Rhubarb, Myrobalans, Syrup of Roſes laxative, Violets, Catholicon, and the lenitive Electuaries mentioned, with Senna, if you will have it ſtronger, or Diaprunis.

A Potion is thus made. Take *Polypody two ounces, Senna one ounce, Liquoriſh one ounce and an half, Raiſons one ounce, Prunes ten, Jujubies, Sebeſtens, each ten pair, Barley one pugil, Aniſe ſeeds one dram*: make a Decoction, add *Syrup of Roſes ſolutive two ounces, Syrup of Violets one ounce*, you may infuſe *Rhubarb.*

Alſo uſe Clyſters of Mallows, Marſh-mallows, Violets, Prunes, the four cold Seeds, with Caſsia, Honey of Violets, Oyl of Violets, red Sugar, &c.

Vomiting, becauſe it draweth Choler from the Meſeraicks, which keeps the urin from ſharpneſs, is good.

They alſo uſe Frictions and Sweating, to revel or draw back the Choler.

If you fear an Inflammation in the lower parts by reaſon of pain, let blood in the vein under the Knee.

And open the Hæmorrhoids when they are uſual, to take away Choler.

Give Alteratives which cool the urin and reins, and leniſie the paſſages, and ſtupefie, and take away pain, of which there are divers forms.

Any Milk drunk, doth leniſie, and heal Excoriations of urin.

An Emulſion is excellent, of cold Seeds the greateſt, being bruiſed, and mixed with Barley-water, and ſtrained; or of Almonds, pine-nuts, or altogether, with white poppy ſeeds, which take away pain and heat.

Make a Mucilage of Quince ſeeds, Lime ſeeds, Mallows, Marſh-mallows ſteeped in proper water, or boyled in the former Decoctions, give *one ounce and an half*, with Broath or Milk, the Mucilage of Fleabane is excellent, and the Infuſion of Gum Traganth.

The White of an Eg well beaten, and the froath caſt off, taken often alone, or with Sugar of Roſes, or Oyl of ſweet Almonds.

Alſo a Decoction of Marſh-mallow roots, Mallows, Sebeſtens, the great cold Seeds, white Poppy ſeeds, Fleabane or Quinces in Water or Broath, with Sugar.

To this we add to provoke urin, red peaſe, Liquoriſh, Winter-cherries, and in cholerick Natures, theſe Coolers, Endive, Lettice, Violets, Bugloſs &c.

The Julep and Syrup of Violets, purſlane, and Jujubes, and other Coolers, is alſo good.

The Waters alſo of Mallows, and Marſh-mallows.

A Pouder to abate heat in the urin. Take *the Seeds of Guords, or Pompions husked, and other new cold Seeds, one ounce, white Poppy ſeeds three drams, white Henbane ſeeds one dram, Sugar pellets, or Sugar of Roſes one ounce*: make a pouder, give *one dram with Milk or Broath, or Julep, or convenient Water.*

Or, Take *of the great cold Seeds one ounce, white Poppy-ſeeds freſh three drams, Line-ſeed, or Quince ſeed one dram and an half, Mallow ſeeds, and white Henbane ſeeds, each one dram; Purſlane ſeeds, and Winter-cherries, each half a dram; or Smallage ſeed to provoke urin, Starch one dram, Almonds, Nuts, Pine-nuts, or Piſtachoes three drams, Gum Traganth, Arabick, each half a dram; or Gum of Peaches, or Almonds*: make a fine pouder, uſe it as the other. You may add pouder of Liquoriſh, or the Juyce thereof.

Sometimes we add Opium when the pain is great, *to two ounces of the Pouder half a dram*, mixing it well, and giving *one dram* at firſt, to try the Operation.

When neceſsity urgeth, we give ſtronger Narcoticks, as Syrup of Poppies, and the like, mentioned in the Colick.

Injections are uſed to leniſie the paſſage, and the bladder, and to take away pain which the urin cauſeth.

Of Womens Milk, or other Milk; or of the Emulſion of the cold Seeds, or of white poppy ſeeds.

The White of an Eg, the Mucilage of Quince ſeeds, Line-ſeeds well diſſolved, with water of Violets, Mallows, Nightſhade, Guords, or with Milk, or the mucilage of Mallow ſeeds, with Henbane and poppy ſeeds, is alſo good.

A Decoction. Take *Marſh-mallow-roots one ounce, mallows one handful, Barley one pugil, the great and leſs cold ſeeds and white Poppy ſeeds, each two drams*; boyl them *in Milk.* It will more aſſwage pain, if you boyl therewith *half an ounce of the Barke of the Roots of Mandrake, or ſome Heads*

of Poppies, or two drams of Henbane-ſeed.

Alſo the Oyl of ſweet Almonds, and Violets mixed with the Injections. Or to take away ſenſe of pain, the Oyl of Mandraks, or that of Poppy ſeeds, or Henbane-ſeeds.

Theſe Oyls are to be put into the Yard with a tent.

You may mix Opium with theſe Injections, or with Milk, *one dram to twelve ounces.* Sometimes you may add Camphire alſo, with Opium, and Saffron to the tents.

A Bath to ſit in is good, of Mallows, Violets, Chamomil, and Melilot flowers, and the like: Or you may foment the Peſten, and Perinæum therewith.

Alſo bath the Yard therein, or in warm Milk and Oyl.

Or foment it with the ſame warm, with hot Clouts, and alſo the Fundament, and this will do well, becauſe while the pain remains, the Glans is cold, and when it is gone, it is warm. It is good alſo to heat the Feet, becauſe Cold doth them hurt.

To piſs in running water, till it make a noiſe, we have found profitable.

Alſo to piſs often in a Sheep-fold, where the Dung is hot, or in Horſe dung, is good againſt heat of Urin or Strangury.

Epithems to the Liver and Reins, and Oyntments are good when the urin is cholerick, eſpecially when they are hot. They are mentioned in the hot Diſtemper of the Liver and Reins.

The like are to be given at the mouth.

A certain Soldier affirmed that he was cured of the ſtrangury by only looking upon the Flower of the milkie Mary-thiſtle.

Let the Air be temperate and cool, beware of too much heat, and things that cauſe Choler, from great motion of the Body, or paſſion of the Mind; from hot, ſalt, and ſharp Meats and Sauces; from Wine, except with much water, and a little. Let him drink Barley-water, or Syrups with Water, or Whey. Let his Meat be ſuch as allays ſharpneſs, and gleweth the paſſages as Neats feet &c. Alſo Pap of Milk and Meal, or Starch: Alſo Barley-cream, of Almonds, Pine-nuts, Piſtachaes, ſmall Nuts, and rear Eggs. Alſo prunes, Apples, Jujubes, Sebeſtens, with Lettice, Spinage, Orach, purſlane, Bugloſs, boyled in Milk, alſo Oyl and Butter.

Copulation is hurtful, becauſe as I ſhewed, the Seed is ſharp, and will provoke as it paſſeth.

The Cure of hot piſsing from the Stone.

If ſcalding Urin come from the ſtone of the bladder, without ulceration; of which we ſpake in troubled Urin. And if the Stone hath not been long there, but fell from the Kidneys, nor be too great, it comes forth with the urin of it ſelf, or by the uſe of medicines. But if after it is fallen into the bladder from the reins, and it grow ſo great that it cannot paſs the neck of the bladder, but when it comes thither, cauſeth pain and heat, then it muſt be taken out, either by medicines to which it will ſcarce yeeld, or by cutting which endangereth the life: As ſhall be ſhewed in the Cure of the Stone of the Bladder.

The Cure of the ulcer of the reins and bladder.

Turbulent or mattery piſsing, like ſlime, comming from the ulcers of the reins and bladder with heat of urin, is not cured but by the Cure of the ulcers. And that being difficult, maketh the cure alſo difficult of that which comes from the ulcer. The ulcers of the reins being old, increaſe matter in the vein, and devour the ſubſtance of the reins, leaving only a hard skin like a purſe. And if this be but in one Kidney, the Patient may live long, and the other Kidney may perform the duty. The ulcers of the bladder are either incurable, or very obſtinate, becauſe they cannot unite by reaſon of the moiſture, and becauſe the urin being ſalt, doth alwaies provoke. The greateſt hope is when the fleſhy part of the Neck is only ulcerated: but when the membranous part ſuffereth it cannot be healed, except as we ſhewed in Wounds of the Bladder, it grow to the fleſh adjoyning. If a Stone be with theſe ulcers, either in the reins or bladder, it makes them incurable, becauſe the ulcers cannot be cured, except it be taken out, and that is impoſsible.

We ſhall ſpeak of the Cure of the Ulcer of the Reins and Bladder together, becauſe they agree in many things. They are to be cleanſed, and then dryed and healed, alwayes mixing things that reſiſt ſharpneſs of urin, and lenifie the paſſages, and ſtupefie the pain; or uſing ſometimes one, and ſometimes another, as neceſsity urgeth: For the ulcer of the bladder and neck thereof, uſe Injections. And if a Stone be therewith, mix things to break it, but gentle, leaſt you enrage the ulcer, or cut out the ſtone, for the ulcer will not elſe be cured: As we ſhewed in the Stone of the Bladder. Many Cleanſers mentioned in the Cure of the Ulcers, are good here to break the Stone.

Alſo ſlimy and glutinating things which defend the ulcer, and take away ſharpneſs, and cover the ſtone, and make it ſmooth. But for the Cure of the ulcer of the reins and bladder we take this courſe. As for purging it is ſufficient to purge the Guts for excrements and wind, which increaſe the pain, bewaring of ſtrong purges, which would do the ſame, and not cleanſe the ulcer.

Gentle Laxatives mentioned in the heat of piſsing for the urin, are good, eſpecially Caſsia, with Liquoriſh pouder &c. Alſo Manna which cleanſeth ulcers, and Whey, and chiefly Turpentine, which looſneth the belly, and heals the ulcer.

Things that alter, cleanſe, and heal, and allay the heat of urin, are given in divers forms.

Alſo the Decoction mentioned in ſcalding Urin, with the Roots of Comfrey, Agrimony, Plantane, Ceterach, Myrtle ſeeds, and the like.

Or this Decoction. Take *Guaicum half a pound, Comfrey roots two ounces, Skins of Gourds dryed one ounce and an half, Horſtayl one handful, red Roſes one pugil:* boyl them *in Rain-water to four pints.* Let them often take a draught *with Honey, Sugar of Roſes, or Syrup of Myrtles &c.*

Alſo the Juyces of the Plants alone, or made into Syrups, are good.

Alſo Water of Horſtayl, Plantane, Myrtles, &c.

As Milk is good in ulcers of the Lungs by cleanſing, glewing, and ſenifying, ſo eſpecially here, becauſe it can better get to the reins.

Roſin of Larke-tree, or Tutpentine is good, for it cleanſeth and glueth, and you may know the vertue of it reacheth to the reins by the violent ſcent of the urin; give *one dram* or more, if you will have it looſen the belly, or in pills with Liquoriſh, Sugar, and the like: It will work beſt with the Yolk of an Eg, and Honey, with water and wine.

The chiefeſt Pouders to cure ulcers in the Kidneys and Bladder, are made into Troches, with Gum Arabick, that they may keep. Theſe are poudered again, and given *one dram* with, or without Sugar, with Milk, or Water, and Honey, or the like in the morning faſting, or at night, eſpecially if they be Narcotick, that they may ſleep four hours after ſupper.

Theſe pouders may be made a bolus, or pills, with turpentine.

The troches of Alkekengi are uſual, being made of Seeds of Nightſhade, Winter-cherries, the four leſs cold Seeds, Poppy, ſweet Almonds, Pine-nuts, piſtachaes, Barley, Liquoriſh, Roſes, Gum Arabick, Myrrh, Bole, Spodium, Sugar-candy, pellets, and Hydromel.

Others that cure the ulcer, and aſſwage pain, are thus made.

The firſt. Take *the Pouder to abate heat, mentioned in* often *Piſsing, Comfrey roots one dram, red Roſes, Amber, Frankincenſe, each two ſcruples; Bole, or ſealed Earth one dram, Dragons blood, Spodium, each half a dram;* make a pouder, give it as formerly.

Another made of divers things, and very excellent. Take *Almonds, Nuts, Piſtachaes, Pine-nuts, each half an ounce; bitter Almonds, and Peaches, Cherries-ſtones each two drams; Cheſnuts, Acorns, and cold Seeds, each half an ounce;*

ounce; *Barley, and Rice, each three drams; Comfrey roots two drams, Liquoriſh half an ounce, red Roſes, Pomegranate-flowers, Purſlane, Lettice, Endive, Fleabane, Cotton, Line, Quince, Mallow, Myrtle, Coriander, Winter-cherries Aniſe, Smallage, and Parſley ſeeds, each one dram; white Poppy ſeeds half an ounce, Henbane ſeeds two drams, Date-ſtones five, Cherry, and Plum-tree Gum, each two drams; Gum Arabick, Traganth, each one dram; Turpentine half an ounce, Frankincenſe, Amber, each one dram; Juyce of Liquoriſh, Wheat, or Starch, each two drams; Acacia, or Juyce of Sloes one dram and an half, Sanguis Draconis half a dram, Opium* when there is pain, *one dram, Bole, or ſealed Earth ſix drams, red Coral, Oſteocolla the ſtone ſo called, Crabbs eyes, each two drams; Spodium one dram, Aſhes of a Bulls or Dears pizle half a dram, red Sanders one dram, Sugar Candy, and Penidyes, each one ounce*: make a Pouder, give it alone, or with *Gum Traganth made into Troches, or with ten ounces of Sugar mixed, give two drams by it ſelf, or made into Troches.*

The third Pouder is only for curing of Ulcers. Take *red Coral waſhed two drams, pouder of Horſtayl, and aſhes of the ſhells of Pompions, each one dram; Frankincenſe, Maſtick, Sarcocol ſteeped in Milk, each half a dram; Sanguis Draconis one ſcruple, Sugar candy, or of Roſes, the weight of all the reſt.*

Half a dram of the Pouder of Cuttle-bone, or from ſix grains of the Mageſtery thereof to ten, given in a rear Eg, or old Conſerve of Roſes, in the morning, as it ſtops the running of the reins, ſo doth it the burning of troubled urin, from the reins and bladder ulcerated.

To theſe Pouders you may add Opium, as in the Troches of Winter-cherries.

Or other Narcoticks as in ſcalding urin, which I have obſerved a hundred times and more, being taken every night in this and other painful Diſeaſes, hath allayed the pain, and refreſhed the Patient that he hath lived, though without it he could not for pain.

Healing and narcotick Pills. Take *Frankincenſe, and Maſtick, each one dram; Myrrh, Storax, and Gum Traganth each half a dram; the Barks of Mandrake one dram, Henbane ſeed half a dram, Opium, and Juyce of Liquoriſh diſſolved in Wine, each one dram; with Syrup of Poppies,* make *Pills,* give one or more, as you ſhall think fit.

Injections are not for the Kidneys, but for Ulcers of the Bladder, to which they ſcarce reach in men, by reaſon of the bending and length of the Yard, but return again, though not in women; and if the Inſtrument be thruſt to the neck of the bladder, it will hurt the ulcer: yet they are to be uſed for neceſsity.

For making whereof, take Cleanſers and that alſo dry, which is hard by reaſon of the conſtant moiſture, and things that abate heat of urin, as thoſe Anodine Injections there mentioned.

They are made of Milk which aſſwageth pain, cleanſeth and healeth Womens and Cows Milk aſſwage pain beſt, or Goats, with Sugar, or Honey, Water, and Whey, when you will heal, uſe Sheeps milk, or other boyled and mixed with Sugar, or Honey.

Alſo the Decoction of Barley, with Bean ſhales, Sugar, and Honey.

Wine is good to cleanſe, if white and thin, with ſome drops of Spirit of Vitriol.

Alſo Whey, and ſome drops of Spirit of Vitriol injected with a Syringe, doth cleanſe.

A Decoction for an Injection to cure ulcers. Take *the Roots of Comfrey one ounce and an half, the dryed barkes or skins of Pompions one ounce, Horſtayl, Plantane, Nightſhade, each one handful; Roſemary, and St. Johns wort flowers, each one pugil, the four great cold Seeds ſix drams*: boyl them *in Barley-water, in a pint whereof diſſolve four ounces of Sugar, or Honey.*

If you muſt dry more, add Mouſear, Solomons-ſeal, Shepheards-purſe, Ceterach, Bettony, Herb Robert, Daffodil roots which glew well, alſo plantane and purſlane-ſeeds,

Adding alſo the Juyce of Plantane, Horſtayl, Shepheards rod, alſo Starch.

Alſo the Waters of thoſe Plants are good, eſpecially plantane, or Myrtles, Brambles, or Olive tops, Roſes, Centaury, of St. Johns-wort.

Alſo ſteeled Water, or wherein Iron is quenched, or melted Lead hath been often infuſed.

There are glewing mixtures for Injections. As, Take *Sarcocol ſteeped in Milk one dram, the Infuſion of Gum Arabick or Traganth half a dram made in an ounce and an half of Plantane-water, Ceruſs half a dram, Dragons blood one ſcruple,* diſſolve them *in Milk, or a Decoction, or ſtilled Waters.*

This oyly Injection heals ulcers. Take *Hens dung, fry it in a pan with Butter or Oyl emphacine, then put them in cold Water, preſerve the Oyl that ſwims at the top.*

Mix with theſe, ſomtimes things that aſſwage pain, as the Decoction of white poppy ſeeds, Rinds of Mandraks, or Mucilages, the white of an Eg, and Opium in caſe of great pain.

In obſtinate Ulcers the Decoction of Litharge is good, two ounces, in plantane, or Roſe-water four ounces.

Or mix with the Injections mentioned, Bole, Cadmia, or Braſs ore, called *Lapis Calaminaris*, Tutty, Ceruſs, Lead burnt and waſhed: Antimony, and the Juyce from the grinding of a Bloodſtone. And in filthy ulcers a little Myrrh.

The troches of Alkekengi, and Gordonius, are good to be taken at the mouth, and thoſe of Amber, ſealed Earth, Spodium, diſſolved in the Liquors aforeſaid.

Some drying Collyriums for the Eyes are good here, as that white one, and the yellow one, and that of Frankincenſe of *Rhaſis*; alſo of Tutty, and the like, of Ceruſs, Sarcocol, Frankincenſe, Gum Traganth, Arabick, Starch, which aſſwage pain, with Opium.

A little Ægyptiacum is good when ulcers are very foul.

The Chymiſts commend the ſpirit of Mercurius dulcis, with plantane or Horſtayl-water, injected to cure ulcers in the Yard and Bladder, cool Oyntments for the reins are good to cool the urin: As we ſhewed in burning urin.

You muſt anoint the privities, and perinæum, or ſeam, with Oyl of Roſes or Violets, with Oyl of Myrtles, Quinces, and a little Vinegar, if the pain threaten Inflammation.

To theſe Unguents are added, Ceruſs, Litharge, Juyce of plantane, and Horſtayl to dry the ulcer, yet they do little outward, and becauſe by aſtringing outwardly, they will ſtop the paſſage of urin, it is better to uſe relaxing Oyntments to open, as Oyl of ſweet Almonds, Chamomil which alſo ſtay pain.

You may make Fomentations of the ſame for the pecten or perinæum, as of Mallows, Chamomil, Melilot, with Coolers if there be heat, as Water-lilly roots, and flowers, Violets, &c.

The Diet muſt be as in the Cure of ſcalding Urin without an ulcer, and glutinous Meats that cover the ulcer, to keep it from ſharpneſs. Fat things foul ulcers, and are not here good.

The Cure of turbulent piſſing from the Reins.

Other thick piſsings as of matter, or of milkie white from the Reins not yet ulcerated, come from a filth that is bred there, and mixed with the urin, becauſe they cauſe heat in piſsing, and by continuance alſo excoriation of the bladder that cauſeth an ulcer, muſt be cured.

This is done by purging the Body from foul excrements and humors, which cauſe the filth to grow to the reins, and is turned into matter: then by cleanſing the reins with things mentioned in the Cure of the Ulcer of the Kidneys. Among which Turpentine is excellent, and Milk, and the like, with Lenitives which take away heat, mentioned in Heat of Urin, which allay the acrimony of urin, and of this matter alſo.

The Cure of pissing of matter from the Liver and other parts.

As for the Pissing of Matter which comes from Impolthumes in the Liver or other parts, besides the Reins and Bladder, or from an Empyema a Pleurisie or Peripneumony. In these you must help Nature in her motion, and not stop, with things that cleanse the filth of the blood by urin, mentioned in Feavers, and for the rest, go to the Disease rather then the Symptom.

The Cure of pissing blood from the stone

If Pissing of Blood come from a stone which grateth upon the Loins, through motion, because there is then but little blood mixed with urin, and it continueth not but when motion ceaseth, the urin comes to its colour again, it requires no other Cure but that of the Stone, which is the cause thereof: As we shewed in the Cure of the Stone.

The Cure of pissing of blood from Anastomosis or hurt of the Reins.

But if Pissing of Blood come from the Kidneys, being too full of blood, which Nature sends forth with the urin, being impure or too thin, it must be cured, if it continue. And also if it come from a hurt in the Reins, with these medicines following.

We revel or pluck back the blood when it flows too much, by blood-letting and cupping, in the extream parts, but if the Loins be cupped, the blood would be drawn thither from the great Veins.

If the Flux come from the blood being watery or unclean, it must be cleansed with gentle purgers that astringe as we shewed in all other Haemorragies.

We stop the Flux with things that thicken the blood, and stop the passages, with some things that stupefie the sense, as follow.

Pouders are given with Sugar of Roses, or an Eg, or steeled Milk, or Sheeps milk, or old red Wine, Syrup of dryed Roses, Myrtles, or convenient Waters.

These are proper, pouder of Horstayl, Yarrow, Comfrey roots, Snakeweed, five leaved Grass, Myrtle seeds, Date-stones, Maudlin according to *Dioscorides*, wild Cummin seed, Bole, or sealed Earth, Blood-stone, red Coral which dissolves the clotted blood, Amber, burnt Ivory, Gum Traganth, Arabick, Acacia, and the like.

The troches also of Amber, Winter-cherries, of *Gordonius*, and such as bind, mentioned in the Ulcers of the Reins, that allay the heat of the urin.

Waters, Juyces, and Decoctions of Plantane, Purslane, Yarrow, Shepheards-purse, Sumach, Quinces, and the like.

Also Narcoticks, as Philonium Persicum, as in other Fluxes, and other Troches, with Opium. And with Henbane seeds, as in Spitting of Blood.

Anoint the Reins with this. Take *Bole, or other glutinating Earth, half an ounce; Rinds of Pomegranates, or Galls two drams, Dragons blood, Allum, each one dram; with Oyl of Myrtles, the White of an Egg, and a little Vinegar*: make an Oyntment or Plaister, *Juyce of Plantane instead of the Oyl, is better.*

Mix Juyce of Purslane with Barley-flower, and apply it to the Reins.

The Cure of pissing blood from taking of Spanish Flies.

If Pissing of Blood come from taking of Cantharides or Spanish flies, we give things which allay the heat of urin, by which the mouths of the emulgent Vessels are opened, and this Flux is raised; chiefly the Decoction of Line-seed, and steeled Milk: Emulsions of the great cold Seeds, white Poppy seeds, and sweet Almonds. Also Oyl of Almonds, Roses, whites of Eggs, and Mucilage of Fleabane seed. And if it continue other remedies mentioned.

The Cure of pissing of blood from hurt of the bladder.

If Pissing of Blood come from a hurt of the bladder, in regard much blood cannot flow from so few veins, you must apply remedies to the hurt or wound, both at the mouth, and by Injections. And if it continue, use the remedies mentioned, and the Oyntments to the bladder.

If clotted blood stop the bladder, we give things to dissolve it, as Amber, Kids Runnet, and the like, mentioned in want of Pissing from clotted blood, chiefly Savory dissolves blood in the bladder. And if you put the Yard into a hollow Raddish, the clotted blood will come forth.

The Cure of preternatural pissing from a wound.

When the Urin comes forth at a Wound, as when you cut for the stone, there is no way but to cure the wound.

When a wound pierceth the lower parts of the belly and bladder, and the urin comes forth, cure only the wound; but if it be incurable as usually it is, the urin will pass that way till death; neither will the ulcer grow together: As we shewed in the Curting of a fleshy Rupture, when the bladder was divided, so that the wound turned into a Fistula, and the Patient pissed through it without other inconvenience, because the urin fell not into the belly, but came forth. Somtimes as in him that was gored with an Ox through the belly and bladder, when the wound is cured, the urin turns to its proper passage; which we suppose was done because the wound was in the fleshy part of the bladder, which will grow together, and be healed, otherwise in the membranous part it will not, except the wound be near to some flesh which is pierced, unto which the membrane may grow, so that the hole in the bladder may be covered with a Callus, and the urin return to its Natural passage.

CHAP. XI.

Of Dejection, or going to Stool.

The Kinds,

Preternatural Dejection.

DEjection is commonly that Excretion which is by the Belly, by which the Excrements thick and thin are voided with divers Humors. This is preternatural when the Excrements voided are too many, and is called *Diarrhæa*. Or when other humors are mixed with the excrements or raw flesh, in the Lientery: Or the Chyle in the Cœliack passion mentioned, or blood in the bloody flux, or matter, or fat, mentioned in the unctious Dejection. And if things are voided, as worms, and other things taken; we shall mention them in a Chapter by themselves. Also that is a preternatural Excretion of the belly, when the excrements pass the wrong way. Of which we shall speak in order.

Diarrhæa or Flux of the belly over purging.

Diarrhæa is a Flux of the Belly, if it come after the taking of a purge, it is called an over-purging. this is a preternatural, immoderate, and often going to stool, when the dung and other excrements and humors, are voided often, more or less. These are first thick, then thin and watery, of divers colours, ash-coloured, clay-like, yellow, black, equally or unequally tinctured: many times mixed with white, thick, clammy flegm. This excrement is somtimes waterish, frothy, clammy, clear, and white, like Froggs spawn; somtimes thick, like melted glass, as we have seen after a stool, without evil scent.

The Flux of the Brain.

Somtimes frothy Flegm is voided in abundance, and then it is called the Flux of the Brain from whence it comes; somtimes it is yellow, cholerick, and froathy; somtimes black and thick. These, because they are voided thick, and but few, rather cause a needing or *Tenesmus*,

then

then a Dirrhæa: Of which we shall speak, which continually molesteth without voiding much, and with great difficulty.

In Dirrhæa's there are somtimes pains of the belly, greater and less, with stretching and rumbling, especially at first: Somtimes there is a heat in the Fundament, and desire to void often, especially in Tenesmus.

Somtimes there is pain of the stomach or heart as they say, with vomiting, yet not so violent as in the Disease Choler, mentioned in Vomiting, by which the meat, chyle, slime, flegm, or choler in the stomach is vomited up; somtimes other natural faculties are hurt, and there is a Feaver.

Lientery. Lientery is a preternatural Dejection of the belly, in which the meat eaten is little changed, but comes forth with other excrements in a Flux, not so great as a Diarrhæa: Somtimes with noise of the stomach and belly, and hurt of Natural Functions.

Cœliack passion. The Cœliack passion, is that preternatural Excretion of the Belly, whether it be more or less, in which the Juyce made of the meat eaten, or the Chyle imperfectly concocted or crude, and moist of an Ash, or Clay-colour, thick and whitish: somtimes more or less, pure, is sent forth. And the Patient is weak, and evil coloured.

Dysentery. Dysentety is a voiding of blood, either alone, or with other things, it is so called, because the guts are affected. It is mamy times popular or Epidemical, most in young men, somtimes in old men, and men of such and such a constitution. In this there is an urging molestation to void somtimes more, somtimes less, with often needing and gripings with noise and rumbling, and blood is mixed with the excrements, and besides that a slime like flegm, or like that fibrous substance which is in blood that falls into water, when a vein is opened, this is falsly called flegm, and is voided somtimes in great abundance: The Germans call it the white Dysentery. This slime is thought to be fat by some, because the guts being turned by the Butchers are fat, they suppose that they are inwardly also fat, which is not so; some say it is the shavings of guts, which if they come forth, as seldom they do, are membranous. Also Choler yellow, green, or black is mixed therewith, and also Flegm as in all Dejections or Stools.

There is commonly a thirst in this Disease, and signs of heat, the urin is dyed and cholerick; and there is a Feaver called *Synochus*, usually, as we shewed in the Disease Choler.

Somtimes a Dysentery follows a Feaver, either putrid, continual, or intermitting, or which is more usual, malignant, and pestilential, which is contagious and epidemical.

I have often observed a Hiccup to continue till death in a Dysentery, and other great Symptomes.

Bloody Stools that come from an Inflammation, with gripings and symptoms of a Dysentery, not from an Ulcer, mixed with excrements, are taken for a Disentery.

Tenesmus. Somtimes slimy matter mixed with a little blood is voided, and it is called *Tenesmus*, or Needing from the great straining without intermission, without other pains, if this continue, at length there is nothing voided but abundance of matter, without any ulcer appearing in the Fundament.

The Liver-flux. Somtimes wateriſh blood is voided like that water wherein bloody flesh hath been washed, and it is called the Hepatick Flux, because it comes from the Liver. This Flux is great and without pain, most in the night, and continueth long: It weakens the strength and the natural Functions, and comes with thirst and other accidents. The bloody thin Flux in a Dysentery, is like to this.

Voiding of clotted blood by stool. Somtimes congealed blood or parched black like Pitch, is voided with the excrements more or less joyned with vomiting of the same: As we shewed in Vomiting, with great weakness and other accidents.

Sound people have often a Flux of pure Blood from the Hæmorrhoids, which is not mixed with the excrements, and shall be mentioned in other Excretions of Blood.

Matter voided by stool. The voiding of Matter in the Dysentery and Tenesinus, is little and without pain, and somtimes when the Dysentery is gone, it continueth and weakneth the Patient. Somtimes matter is sent forth in abundance without pain, for a long time, and the Patient is evil coloured, and consumeth, with other Diseases in the Natural parts.

Slime and Flegm voided by stool. There is somtimes a slimy and flegmatick Dejection in a Diarrhæa: and it is often mixed with blood in a Dysentery and Tenesinus, and towards the end in a Tenesmus it comes forth pure matter. And *Fernelius* observes that more white Flegm may be voided without pain, after long Diseases and great riding.

Voiding of Fat by stool. Somtimes Stools are unctious and fat like Oyl or Butter, or other Grease. And we have seen them like tallow candles ends, with other excrements for a long time, and many. I have seen the same like suet not melted often, as big as Hazel-nuts in an old Diarrhæa. This is a kind of Lientery, if they come from things eaten, and often; or of a Diarrhæa. if they be voided with other things, and come from any thing but meat. And this they call the melting of the Guts, from a mistake of the cause.

When excrements or dung come another way then the ordinary, it it preternatural, as when they come from these places following.

The voiding of Excrements by vomit. Dung or Excrements are vomited somtimes which stink, and are thin, like Chyle with great pain, and wonder to the Spectators. In the Disease called *Convolvulus* in Hernia or Rupture: as we shewed.

The voiding of Excrements by urin. We have seen the Fæces or Excrements of the belly voided by urin, with bones of birds, with pissing of matter, heat of urin, and great pain. And I have seen the kernels of Apples voided the same by stool.

The voiding of excrements by the womb. We have also seen the Excrements of the belly voided by the womb, with matter and other accidents.

The voiding of excrements at wounds. Somtimes the Chyle as also the Excrements will come forth at a wound of the belly; not in such only as die presently, but in them that live long after, from a Fistula that hath remained.

The Causes.

The Cause of all these preternatural Dejections, being more or oftner then is fit, or strange, and unusual, is in the Stomach and Guts.

The irritation of the stomach, is the cause of preternatural Dejections by stool. And the chief is the irritation or provoking of the bowels that are so sensible, which so stirs up the expulsive Faculty, that it strives to expel what is therein, especially if the parts adjacent be also stirred up by consent, so that they endeavor also to expel what is in them; this causeth divers kinds of Dejections, with griping and pain. For if the Stomach be stirred up, it sends things to the Guts, rather then to the mouth, except it be so disturbed, that it must presently discharge: as I shewed in Vomiting. Therefore the stomach avoids great evils, and is more seldom ulcerated then the Guts.

When

The irritation of the guts, is the cause of Dirrhæa Dysentery, and bloody Flux.

When there is an irritation in the long passage of the guts, it causeth Dejections more or less. By this the expulsive Faculty of the guts is stirred up, and sends downwards what is in them, and by straining causeth a Diarrhæa, with griping. Or if it be greater, and knaws or corrodes the substance of the guts there is a Dysentery; and if the Colon be affected, the pain is about it, especially on the left side. And because the Colon passeth under the Navel, there is pain also. And if the thin guts are affected, the pain will be there. And the blood which is voided with the excrements, is more or less mixed, by how much the farther it flows from the thin guts, and the nearer from the strait gut. And the greater the hurt, the more the blood, and the less when the ulcer begins to stink, for then there is matter also. And this blood is thinner or thicker, purer, or more impure, as it is in the Meseraicks. And from the pain there is a Feaver, especially if it cause an Inflammation of the guts, which is somtimes joyned with a Dysentery. And by reason of strong irritation, when the guts are not ulcerated, through the opening of the mouths of the vessels, there may be voiding of blood by stool, seldom pure, often clotted, and somtimes black: as we shewed. Or there may be a bloody Flux like a Dysentery with an Inflammation, in which without an ulcer of the guts, blood flows with great pain, a Feaver and straining: As we have observed in Infants opened, that have been thought to die of a Dysentery.

The irritation of the strait gut, is the cause of Tenesmus.

If this irritation be in the end of the strait gut, or an ulcer, then by reason of the exquisite sense of the part, there is a continual provoking to stool, and is the cause of Tenesmus; which if it come from an ulcer, hath signs of blood and matter, this is the first kind of Tenesmus. If Choler flow, or other clammy Matter, it causeth the second sort of Tenesmus, if nothing, the third. And then the strait gut is provoked or molested with the stone in the bladder that lies near it, or with a tumor, or hard excrements, or heat which inflameth the urin; or from worms called *Ascarides*: As shall be shewed. This Tenesmus which hath needing or straining, without voiding of any thing, may come from cold gotten into the Fundament. And this irritation may open the Hæmorrhoids, and then pure blood is voided.

Pain of the stomach or guts, is the cause of Dejection.

Some Diseases of the stomach and guts cause Dejections with less pain, then irritation, as the being burdened with excrements and humors, and other bodies, or when they are so many that they cannot contain them longer, being preternatural, and of an evil quality which provoketh Excretion. Hence are divers sorts of Dejections: In all which the stomach and guts do sooner void excrements, when they are dilated or loosned.

The stopping of the guts, is the cause of vomiting Excrements.

The Fæces of the Belly, and the Chyle coming upwards, by reason of the stoppage of the guts, cause this preternatural Excretion by vomit, the cause of which stoppage we shewed in the Convolvulus, and in the Cure of the Rupture.

A Wound in the guts, is the cause of voiding excrements thence.

When the guts are wounded, the excrements come out there, if it pierce the belly, and wound the guts, and if the thick guts are wounded, thick Excrements flow out, if the thin, thin: And if the Jejunum be wounded, the Chyle comes forth. And somtimes being turned into a Fistula, the Excretion remains there, and the Patient liveth. And this is when the lips of the wounds of the guts and belly grow together, which is sooner in a fleshy part of the belly. And then if the ulcer be not closed as I have seen, it turns to a Fistula, and lets out the excrements, and keeps them from falling down. This is like that of the bladder: As we shewed in preternatural Pissing.

A Wound in the strait gut, is the cause of Excrements from the womb.

That voiding of dung at the womb, and by urin mentioned, comes from an ulcer in the strait gut, which joyns to the neck of the womb and bladder.

The Causes of all these Diseases of the Stomach and Guts, from whence these preternatural Excretions arise (besides wounds, ulcers, and obstructions, from whence the excrements are sent forth by vomit, urin, or the womb: As we shewed in the Iliack passion,) are from these following.

Purges cause over purging, & bloody Flux.

If purging medicines do so stir up the expulsive Faculty of the Stomach and Guts, that they work too strong, or too long, there is super-purgation. And though this cometh commonly from strong medicines, yet gentle things, as Cassia, Manna, may cause it by their cleansing quality being dry, unctious, and provoking Nature by contrariety. Some purges are sharp, and hot, as Spurge, wild Cowcumber, Coloquintida, Laurel, and these do not only over purge, but ulcerate by corroding, and inflaming, and cause Dysenteryes, or bloody Fluxes, by opening the veins. If the force of them reach to the Fundament, it causeth Tenesmus, as from Coloquintida, or they open the Hæmorrhoids. And the same may be done by Clysters and Suppositories forcibly thrust up, which cause a Tenesmus. And this may be done by the violent use of a Clyster-pipe.

Clysters and Suppositories, the cause of Diarrhæa and Tenesmus.

Besides purges, poyson may cause Diarrhæa's and Dysenteryes. Among which the pouder of a Loadstone drunk, is the cause of a Dysentery.

Also Poysons, and some Meats, Drinks.

Also other sharp and pricking things swallowed, but they stay seldom in the Guts, Meat and Drink by plenty and corruption, or crudity, causeth preternatural Dejections, especially when swallowed down, and being crude, they lie heavy, breed wind, disturb, or being moist, loosen, or fat, and cause slipperiness, and so produce a diarrhæa. Or things that easily corrupt, cause a Diarrhæa sooner, being turned into bad humors: Of which we shall speak. Or things that breed many Excrements, Mud, or Filth, or sordid Matter, by their plenty and adverse quality, may cause a Diarrhæa.

This may be partly from the Meat that will easily be so corrupted, and from the Stomach which is apt to pervert them: As we shewed in Weakness of the Stomach. But if meat remains crude, without any concoction, there is Lientery, when it is much and burdensom to Nature, and thrown out as taken in. This is when things are taken that either cannot be digested, but with great difficulty; or when the stomach is so weakned, as that it cannot concoct; as I shewed in Weakness of the Stomach; also a Scar left in the stomach from a wound, is reported to be a cause when these causes meet, there is a Lientery; and if they be at a certain time from meat that many eat, or the like, there is a popular Lientery, which they suppose comes from the Air.

Choler is the cause of Diarrhæa, Dysentery, or Tenesmus.

Sharp pricking Humors that burn and corrode, cause preternatural Dejections, as yellow and black Choler, which if bred in the stomach and guts, or sent thither from the gall or meseraicks, by its plenty, or in Diseases, as in Jaundies and Feavers, being mixed with the Flegm and slime of the Guts, and with water or serum, made milder, causeth only a Diarrhæa, which sends forth moist, froath, yellow, or black Excrements, as the Choler is. But if the Choler be more malignant, such as corrodes and grips the guts, whereit can lie longer then in the stomach, then it produceth

ceth a Dysentery, with Inflammation or Ulcer, or such a bloody Flux as was mentioned, as Choler is, which flows with the blood and excrements, either yellow, green, or black. Also the same Choler descending to the end of the strait Gut, and there sticking if it be clammy, by provoking or ulcerating the part, causeth Tenesmus. And this may follow a Dysentery, by reason of Choler brought thither by it. This Choler may come from the same causes, with that of the Disease Choler; and is chiefly in young people that eat much green Fruit, which corrupt and turn into Choler, and therefore they have the Dysentery, chiefly in *Autumne*, when the Fruite is plentiful, and the rather, when the Fruit is not kindly but worm-eaten; or as *Rondoletius* saith when they eat astringent Fruit, which stops the passage of the former. This Dysentery is popular or epidemical, when many have it.

Other sharp Humors are the causes of Dysentery, Dyarrhæa, and Tenesmus.

A Diarrhæa may also come from other sharp Humors that gripe like yellow or black Choler, or are corrupt and malignant, when they are qualified with flegm: Or a Dysentery or Tenesmus, may come from the same, being more sharp and not qualified. And if these Dysenteryes have a malignant cause, they are epidemical. And these humors come from evil diet, or humors in the stomach and guts, or meseraicks. As it is often in malignant and pestilential Feavers, that the putrid humors, or venom in the plague which is very hot, being sent by the force of Nature to the guts, as the common shore, and there retained, doth provoke and prick them, and sometimes ulcerate. As I have often observed in the small Pox, that the guts have been ulcerated by the humors, which hath caused a deadly or long lasting Dysentery. These are either joyned with the feavers, or follow them. Also in other venemous Diseases as in the French Pox, when the malignant humor is carried by Nature or medicines into the guts, as by Quick-silver, it will cause a Diarrhæa or Dysentery, as well as a flux or ulcer in the mouth.

Flegm is the cause of Diarrhæa, Tenesmus, and Flux of the Brain.

Somtimes Flegm mixed with dung or humors or water, causeth Diarrhæa's, and is somtimes most pervalent, especially at the conclusion, when all other excrements are purged away. And this Flegm is bred in the stomach and guts, being somtimes watterish, slimy, or glassie from the causes thereof; somtimes it is sent thin like water by the meseraicks, with other humors from divers parts of the body. And this may come from the brain to the stomach and guts, being froathy, and cause the flux of the brain, according to *Hippocrates* Aphorism, which teacheth that they who have froathy excrements, have a flux of Rhewm from the brain. The cause of which desluxion of flegm from the brain was mentioned in Desluxes. Also it is affirmed that salt flegm gathered about the Fundament, may cause a Tenesmus. And if it be not very sharp, there well be no ulcer, but only a straining.

This pricking in this kind of Tenesmus comes not from the sharpness or saltness of the slime, but from its sticking by which it cleaves to the gut, being very sensible, and continually provoketh a needing and straining to discharge it.

The Serum or Whey mixeth it self with the Blood, and other other Humors and Excrements. And the greater quantity there is of it, the more thin are the stools. Especially in a Diarrhæa, where the stools are like water, because the serum mixeth with, and moderateth the sharp and cholerick humors; and this serum is made in the first concoction for moist meat and drink; or it is sent to the guts by the meseraicks, and carrieth divers humors with it, either by nature or medicine in time of repletion, and causeth a Diarrhæa thus mixed. And it appears that this could not come from the serum that sweats through the meseraicks, because the quantity is great, and the flux is constant, and so much cannot be retained in the stomach and guts, nor can the moisture taken in at the mouth cause it, being somtimes very little: Neither is that an objection, that being mixed with blood, it receives no colour from it; when the sweat from the whole body and the water that comes from wounds, and to the reins by the emulgents is not bloody: And after a vein is opened, when the blood is settled, the water or serum is separated from it.

Bloody Serum or Whey is the cause of a Liver-flux.

It cometh to pass, but seldom, that Serum is voided in a Liver-flux in great quantity like water, wherein flesh was washed, tinctured with blood, which it receives from the blood in the meseraicks: And yet in other fluxes of water, are not discolour'd or red. The question is how this should be. Some say the weakness of the liver is the cause, and want of sanguification. And although this may be the cause of abundance of serum and crude blood which causeth a Diarrhæa, yet because the tincture is seldom, there must be another cause not ordinary in the liver and meseraicks. As the thinness of the meseraick blood, or the dilatation or opening of the mouths of the vessels. And the cause hereof is rather the heat then coldness of the liver, as appears by the heat, thirst, and burning about the Hypochondria, with a Feaver somtimes, and somtimes after; as also in regard it is cured by cold things rather then hot.

From this heat of the Liver, and Constitution of blood, with the Anastomosis or opening of the Veins caused by this heat, it comes to pass, that the Serum returns the same way tinctured with a little blood, and falls into the Guts, causing this bloody tincture in the flux of serum, as in a Dysentery from an ulcer that opens the mouths of the veins.

Slime in the stomach and guts, is the cause of slimy Dejections and blood slime, is the cause of a Dysentery.

That Slime which besmeareth the stomach and guts, cannot alone cause a preternatural Dejection, because it comes seldom forth alone, but when it is mixed with other excrements being much in quantity. The cause of the abounding of this is clammy meat which breeds excrements. But that slime which is in a Dysentery, if it be voided more then other excrements causeth the white Dysentery, and the same causeth a Tenesmus. This slime from the ulcerated substance of the guts, which being membranous, causeth such matter, as we see in the ulcer of the bladder; which at first hath some signs of blood, and is after white matter. And because it is gathered into the strait gut about the Fundament, it being thick, comes forth alone in this Disease.

Therefore we count this Slime, Matter rather then flegm; which some account salt flegm, that hath only a force of pricking, when it is not so. And the needing in a Tenesmus, comes rather from the hurt of the gut which is very sensible, then from this flegm, though sharp. As for the Slime which *Fernelius* saith, is voided without pain, which some think to be Matter, it is he saith the dreggs of blood from the veins of the Fundament, in long melancholick Diseases, as the Whites in women.

We shewed formerly how Matter like Slime comes from a Dysentery and Tenesmus, and also from a Colick.

Matter voided by stool.

Besides these, Matter in a Dysentery from an Ulcer is continually voided, and also without pain. Which must come from a great ulcer that is foul, because there is so much, and from a part that is insensible, and of no great Functions, because he dieth not suddenly, but consumeth by degrees. This hath been in the mesentery, which is an ignoble part, and sent by the veins into the guts, as appears by Anatomy. If it should come from farther parts, as liver or spleen, it may be brought by the meseraicks; and then there will be great symptoms, as the Dropsie by reason of the ulcers there. If it cannot come

come from the breast or head, because the matter may not be brought for want of passage, though divers have been invented. And if any should pass, it would be very little, and it must pass through the hollow vein into the branches of the gate-vein, which would rather then pass the emulgents to the reins and bladder : As I shewed in their places.

The Chyle is the Cause of the Caliack passion.

When the Chyle slips through the guts it is called the Cœliack passion ; and by reason of the distribution thereof hindered, it is not carried into the meseraicks, but gathered into the guts in great quantity, corrupted, or mixed with sharp humors, and so cast down by stool, as it is in quantity and colour, or mixed with other humors. This want of distribution, comes either from the weakness of the bowels ordained to sanguifie, which cannot attract the Juyce, or from the obstruction of the passages or meseraicks. Also Chyle made of moist and fat meats, doth sooner pass through.

Much fat in the excrements causeth greasie Dejections, and slipperiness of guts and excrements; but doth not enlarge them. This comes from eating Fat, Oyl, Butter, that come forth without concoction ; as we shewed in a Lientery. And they which teach that fat may be voided by reason of the melting and colliquation of the Fat of the Guts, being perswaded that the guts are fat within, and that that Fat may be dissolved or shaked off, were perswaded thereunto, because Fat may be carried from the mesentery, or cawle by the fat membranes that are joyned to the guts, (which if it should be, it must first be melted, that it may pass the meseraicks) which being hard to be done, it is not probable that either that Fat or other that is more remote, should pass. Because there cannot be actual heat enough within to melt it, neither doth the heat of the heart melt the Fat which is about it. Therefore as we shewed in the Hectick Feaver, it cannot pass by urin, so can it not pass here by stool : As we shewed concerning Matter.

Fat Meats and Drinks, the cause of fat stools.

We shewed how blood may cause a flux from the corrosion and ulceration of the guts that flows pure with the excrements in a Dysentery, or in the Hæmorrhoids or clotted. And how being mixed with serum, it may cause the Liver-flux.

And we shewed how Meat might pass not changed, in a Lientery.

The Cure.

First, I shall begin with those Dejections or Purgings that are most difficult, that is the Desentery, then Tenesmus, then Diarrhœa, then Lientery, Liver-flux, Cœliack or Chyle passion, and purulent Dejections, and voiding of fat by stool.

The cure of a Dysentery.

A Dysentery is a dangerous Disease that destroys Infants young and old, and especially when the Guts are hurt, which is known by the plenty of Blood and fleshy Fibres, and Matter voided, with griping of the Belly. And if there be an Inflammation, there is a Feaver and Convulsion. And it is worst when yellow, or yolk-like Choler, or green, like Verdegreece, or black is voided. Also if the strength suddenly fail : And Hiccup following are deadly. It is very obstinate, if it be constant, or if when blood is stopped, there be a Lientery or Diarrhœa, or stinking Excrements. All these fore shew death which follows within a week two or three. If a Dysentery be a symptom of a continual malignant or pestilential Feaver or epidemical, it kills many. Sometimes it ends in a filthy ulcer; and then when the Dysentery is past, they have long after a purulent Dejection which consumeth and killeth.

The Cure is by taking away the Cause, whether it be Choler or other evil Humors, or corroding Medicines, or Poyson. By Evacuations and Cleansers, and by abating the violence of the Lenitives, Stupefactives, and Antidotes, if the Humor be venemous ; and with Coolers, if there be Inflammation. Then we must cure the Disease, which is an Excoriation or Ulceration, with Dryers : As we shewed in Ulcers, with Astringents that dry, and stop the Flux, as followeth.

Among evacuating Remedies, Purges are best, to take away the Griping, venemous Humors of what kinds soever. And these are of the best Operation, when the Cause lyes deep in the small Guts, unto which Clysters cannot reach : And when they are given at first, before great hurt be done, and often if need require. You must make choyce of such Purgers as have an astringent quality, to prevent too much Evacuation from the Disease and Medicine.

And Rhubarb is the best first torrified, to make it more astringent. And then it will be better poudered, but if it be over dryed, it is of no force. Give it at first while strength lasts, for if you give it after it requires more torrifying or parching. The dose is from half a dram to four scruples or five, with red Wine, Rose-water, Plantane, Dock or Sorrel-water, or the like, with Juyce of Quinces, Plantane, or the Syrups of the same, or of dryed Roses, or Myrtles one ounce, or two drams of Acacia. And if you also dry up the Ulcer, use pouder of burnt Harts horn, seed of Roses and Plantane, and other drying Pouders to be mentioned.

To Rhubarb we add yellow Myrobalans, because these purge and bind after, twice as much, because they are weaker.

Also the Syrup of Roses solutive, or of red Roses which bindeth more, made with the Infusion of Rhubarb one ounce, or one ounce and an half.

In the beginning of a Dysentery the purging Extract of Quinces, given four or five spoonfuls is good, it is thus made. Take *two or three ripe Quinces, paired and sliced, the Seeds taken out, put them in a glassed Vessels well stopped, and put it in another Vessel of boyling Water four or five hours, keeping the Water from boyling into it.* Then pour off the Juyce which I call purging Extract, gentle, and keep it for use.

Of all these you may make this Potion, adding things that heal the Ulcer.

Take *Liquorish one ounce and an half, Plantane and Roses each one pugil ; Raisons one ounce, Tamarinds six drams, yellow Myrobalans infused in Wine three drams* : boyl them in Hydromel, when it is strained, infuse *Rhubarb one dram, Spike half a scruple,* strain it, and add *Syrup of Quinces, or red Roses dryed one ounce.*

When the Flux is more slimy, cholerick, of the Excrements many, and not so bloody, give Tryphera Persica, or Sarasenica *Nicolai* two ounces, with astringent Syrup, and convenient Waters ; or dissolve half an ounce of Triphera Saracenica in a Decoction of Citrine and Indian Myrobalans.

Catholicon is given to one ounce, with Rhubarb and Myrobalans, and the like ; also Hiera, Agarick one dram by *Dioscorides*, which purgeth strongly, and is not sharp, if it be given with Honey, or Syrup of Roses, and Rhubarb. Some give Carthamus seeds in Whey : Others the Pulp or Decoction of Tamarinds, which allays the heat of Choler. It is dangerous to use stronger, which will inflame the Guts.

Vomiting is only alowed in a Dysentery, when the cause reacheth to the stomach, and is nourished from it. And if it come from a burning Medicine or poyson.

Blood-letting will do little good, because little is taken from the Meseraicks thereby, which send the Blood into the Guts, and it weakens. Yet when the Hæmorrhoids open of themselves, and flow not too much, they do good.

Sweating doth stop this Flux, and must be used while there is strength, with Coverlidds, Bricks, Bottles, or the like

like, provoking of urin doth the same, by carrying the matter in part to the Ureters, as with this. Take *of the four great cold Seeds beaten with their shells, each two drams; Maiden-hair half an handful, Asparagus roots one ounce, or Seeds thereof one dram, Sumach three drams, Coriander and Anise-seed, each one dram and an half*; boyl them *in Broath*, and let him drink it when he is thirsty.

If the thick Guts are hurt, Clysters are good, because they reach to the part, but if the Ulcer be deep in the smal Guts, they cannot so well reach the part, and are not so proper; but only to take away pain and the Excrements, and to stop the Flux gently. You must give them in smal quantity, when the great Guts are hurt, and in larger, when the small are hurt, that they may reach the part, which if they do, they must be repeated.

These are made of Lenients, Cleansers, and Astringents, against the sharp corroding Humors, and the Ulcer.

Lentive Clysters allay the sharpness of Humors, and defend the Guts, take away pain prevent further hurt, are given at any time, alone, or mixed, as with Stupefactives to take away pain, and stop the Flux. These are good also to cure the Ulcer, if they be mixed with Cleansers and Dryers.

Cleansing Clysters must be first given to take away the Humor that provoketh, and wash the Ulcer, with dryers. And must be continued while the Ulcer is foul; and least these should prick, the parts being very sensible, or inflame them, they must be moderate, except the Ulcer be very foul: And then you use Lenitives after, if they cause pain, or mix Lenitives therewith.

Drying Clysters must be used after cleansing, to heal the Ulcer, with which use things to glew: As we shewed in Excoriation and Ulcers. Among which, they which dry most, and bind are best. These if they be strong, are used in the conclusion, after weaker, mixed with cleansers, if the Ulcer be foul. And when we use strong Astringents for the violence of the Flux, we add glutinous things, that they may not exasperate: And we do not hinder healing, but cause it to be more safely done. These forms following are best.

Among lenitive Clysters, Milk doth not only take away pain, but cleanseth and healeth. That cleanseth most which hath most Whey. And it will heal more, if you quench Stones or Iron in it, to consume the Whey.

It is more operative, and takes away pain better, if to one pint you add one or two yolks of Eggs, or four ounces of Mucilage of Fleabane, or Quince seeds, or one ounce of fresh Suet, which heals Excoriations; As was shewed, Goats suet is best, and then Dears, especially that taken from the Kidneys, which is hardest. This in a great pain is given with an equal proportion of Oyl of Roses.

When we must cleanse and lenifie together, we add one ounce and an half of Sugar, or Honey to the Milk. And if we will heal or glew more, three or four ounces of the Juyce of Plantane.

Cream of Barley, or Almonds, or an Emulsion with Rice, is good to be injected.

Mutton-broath, or Chicken-broath, with yolks of Egs, or Mucilages, are good here, as in the Colick.

A lenitive glutinating Decoction. Take *Marsh-mallow roots one ounce, Barley or Rice one pugil, Line-seed, or Fænugreek, Quince seeds one ounce. Fleabane seeds half an ounce*, and against wind, *Anise-seeds two drams, Chamomil, or Dill flowers one pugil*: make a Decoction *in Milk or Broath*, adding *yolks of Eggs, Suet, and Oyl, as in the Clyster of Milk.*

To all these Decoctions, you may add in time of pain Philonium one or two drams, especially Persicum, which stops Fluxes, or one or two scruples of Cynoglos pills, or as I have done often with good success, one ounce and an half of Syrup of Poppies.

You may use one scruple, or one dram of Opium with the former, but it is better when it is dissolved in Compositions, and fermented.

In time of extream pain, we are constrained to use oyls alone, which otherwise being greasie, and enemies to the Ulcers, we omit them, as Oyl of sweet Almonds, or of Roses that is more astringent, especially Omphacine, or a little Oyl of Quinces, or Myrtles, with Mucilages, and yolks of Eggs.

The common cleansing Clyster is this. Take *Barley-water one pint, course Sugar, or Honey two ounces.*

When we will lenifie also, add to it two yolks of Eggs. And to astringe, use Oyl of Roses instead of common oyl, and one dram of Turpentine, dissolved with the yolk of an Egg, to cleanse and heal.

Whey alone, or Hydromel, that is mead, cleanseth, to which you may add the former.

Another cleansing Clyster. Take *Liquoriss one ounce and an half, Figgs, Raisins, each two ounces; Bran one pugil, Barley, Pease, Lentils, or Lupines two ounces*: boyl them *in Whey, or Mead*, and dissolve therein *Sugar, or Honey.*

A stronger in foul Ulcers, add to the former Pellitory, and Beets, or Centaury, Wormwood, and Gentian, boyled in weak Lye. And if corruption follow, use stronger, as Lye, or Piss, salt Water, Brine, or pickl'd. Some use Ægyptiacum, as in outward Ulcers; or Ointments of Orpiment. The safest of which are mentioned in the Ulcers of the Mouth; and are to be carefully used with Milk, Barley-cream, or Rice, and the like.

To glew and heal an Ulcer, a gentle drying Clyster is made of burnt Milk, with Flints or Steel quenched therein, and Roses boyled.

Another is of Barley-water, and Rice parched, and one pugil of red Roses, with two yolks of roasted Eggs. Honey of Roses, and if you will have it stronger, one ounce of Juyce of Plantane.

The third Clyster to glew and astringe. Take *Comfrey-roots, and Mullein, each one ounce; Plantane, and Cinquefoil, each one handful; red Roses, and parched Barley, each one pugil; Myrtle seeds two drams, Grapes half an ounce*: boyl them in Cistern-water, and dissolve *Honey of Roses one ounce and an half, a White of an Egg, or Gum Traganth one ounce, Goats suet two ounces, Juyce of Plantane, or Solomons-seal one ounce*: make a Clyster.

The fourth Clyster to astringe and dry the Ulcer. Take *Roots of Snakeweed, or Tormentil one ounce and an half, Comfrey one ounce, Shepheards purse, or Red, Solomons seal, or Rupturewort, Horstayl, Monsear, each one handful; Pomegranate flowers, Acorn-cupps, Cypress-nuts, each two drams; Lentils, and parched Rice, each one pugil*; boyl them *in Forge-water*, add *Juyce of Plantane two ounces, and two yolks of roasted Eggs*: make a Clyster.

To these Decoctions Astringents and Healers may be added, as Sanicle, Wintergreen, golden Rod, & other woundherbs; also Myrtles, Mastick-tree, Olive, Sumach, Ceterach, Agrimony, Brambles, Bloodwort, Osier, Sparrow-tongue, Flowers of Chamæleon, Galls, Pomegranate-peels, and the Juyces of astringent Fruits, and Juyces of Plants aforesaid.

Juyce of Plantane alone, or with Milk, or Barley-water is good, two drams of Gum Traganth, dissolved in a Clyster, or infused in Rose and Plantane water, and so mixed, is excellent.

The Infusion of Gum Traganth, with Juyce of Plantane or Goats suet, is also good.

Also the Mucilage of Quince, or Fleabane seed, with water of Plantane, or Shepheards-purse, and an astringent Decoction.

Gum Arabick is as good as Traganth, also Frankincense, Mastick, Sarcocol: these dissolved, glutinate, and do not exasperate the Ulcer, as strong Astringents.

Dryed Juyces, as Acacia, Hypocistis, Dragons blood, a dram or two dissolved in Clysters cause astringency.

Also red Wine from the grinding of the Bloodstone, with Plantane, or Rose-water two drams, added to the rest, doth glutinate and stop the Flux of Blood.

Alſo fat Earths that are not rough, but drying and ſmooth, as Bole, and Terra Lemnia, are good to be mixed two drams, with the former.

The Troches of Amber, or the white troches of *Rhaſis*, two drams, with Milk, Juyce of Plantane, or Decoctions, or with other Clyſters, are good here, as in the Excoriations and Ulcer of the Bladder. And if you add Opium, it will abate the pain.

Other Pouders are not neceſſary, becauſe they ſettle at the bottom, and provoke and exaſperate the part: Yet ſome add burnt Paper, and burnt Vitriol.

Oyntments are too greaſie, as of Roſes, Pompholyx, Diapalma, Divinum, though ſome uſe them.

Some commend the Blood of a Dear in a Dyſentery.

If the Diſeaſe be in the upper Guts, there are other Medicines to be taken at the Mouth, beſides Purges: to leniſie, cleanſe, and cure.

Cow milk leniſieth, cleanſeth, and healeth all inward Ulcers, and is given with Honey, or Sugar of Roſes, when you will cleanſe, or Goats milk.

But if you deſire to heal more, give Cow or Sheeps-milk, which hath had Flints, Iron, or Steel quenched therein.

Take *three ounces of Cow milk, one ounce of Juyce of Plantane, and as much of Sugar of Roſes*, and it will heal.

You may boyl Comfrey roots in the Milk.

Veal-broath that is ſtrong of the Fleſh, is beſt.

Alſo Rice-porrage is good to heal.

And a Decoction of Barley, and Liquoriſh, with Sugar, or Honey, to cleanſe.

A healing Decoction. Take *Roots of Tormentil one ounce, Comfrey and Marſh-mallows, each half an ounce; Plantane, Shepheards-purſe, each one handful; red Roſes dryed one pugil, Sumach, or Grapeſtones two drams*: boyl them in Rain-water, *and a little red Wine*, add to the ſtraining *Sugar of Roſes*. Let him drink it at twice or thrice.

Or, Take *Cynkfoyl roots, or Biſtort, Snakeweed one ounce, Water-lillies ſix drams, Tarrow, or Horſtayl one handful, wild Vine one pugil, Plantane ſeeds, and Sorrel ſeeds, and Dock ſeeds, each two drams*; boyl them *in Plantane-water, and a little Wine*, and diſſolve therein the *Syrup of Quinces*, or the like: make a Potion, give it as the former.

You may add to theſe Decoctions the Roots of Avens, Fern, Sorrel, Polemount, Water-plantane, and theſe wound Herbs, as Conſound, Wintergreen, Mouſear, Straw-berry leaves, wild Tanſey, Sanicle, golden Rod, Willow-herb, Scordium, Agrimony, Knot-graſs, or Rupturewort, Harts tongue, Balſom, Perwinkle, Oak leaves, Brambles, Myrtles, and Maſtick-tree. To theſe we add Diſcuſſers of wind, as Chamomil flowers, Aniſe-ſeeds.

We mix Rhubarb to take away the Cauſe of the Diſeaſe. As, Take *Rhubarb parched one dram, Coriander parched two drams*, infuſe them *in red Wine, or Juyce of Quinces*; let them boyl, and ſtrain them, add *Syrup of dryed Roſes one ounce and an half*: make a Potion for two doſes. If you add *one dram of Acacia, or Hypociſtis*, it will be ſtronger.

Or *two or three drams of Bole, or Spodium, or half an ounce of Maſtick, boyled alone in Roſe or Plantane-water.*

Dioſcorides commends Wax boyled in Broath.

The Decoction of Aſs dung is counted a ſecret, to be drunk after boyled in wine, with things to take away the ſcent.

The Decoction of Earth-worms is alſo good, but let not the Patient know it.

Phyſical Wines are made of burnt red wine, with Steel, or Gold quenched therein, or Tormentil, and Snakeweed roots boyled, which makes the wine more aſtringent, and not unpleaſant. To which you may add Sugar, or Cinnamon that it may be like Hippocras.

You may boyl ripe dryed Sloes in red wine, and it will be aſtringent and pleaſant, and other aſtringent Fruits.

Some highly commend Rice boyled in red wine.

Alſo Juyces, as of Quinces boyled, are good, one ſpoonful, or two at a time, or of other Fruits that are not too ſour to cauſe torments, as of Pears, Pomegranates of the middle ſort, of which wine is made, preſſed with the peels. Alſo the Juyce of Cornil-berries, and the like.

Three or four ounces of the raw Juyce of Plantane heals, and takes away Inflammation alone, or you may give it with Milk or Broath.

Hollerius ſaith that the Juyce of Ground-Ivy drunken, hath ſaved the lives of many.

Some give the milkie Juyce of Engliſh Galangal.

Some ſharp Syrups not too ſour, are given by ſpoonfuls, as of Quinces alone, or boyl'd in Wine, Myrtles, or red Roſes, or of Juyce of Plantane, or the Decoctions mentioned, with Sugar. Boyl one ounce, of Water-creſs ſeeds parched in a pint of Syrup of Quinces.

Alſo Juleps are good, and quench thirſt, as that of Roſes, or Plantane water boyled.

Or give the Syrup with ſteeled water, or ſtilled waters, or Roſe budds, or of Privet, Plantane, Shepheards-purſe, Oak, Goos-graſs.

Let the Diet be of nouriſhing Papps.

As of boyled Rice in Milk, with yolks of Eggs, and Juyce of Ground-Ivy, by which *Lerius* in his Hiſtory, ſaith many Sea-men almoſt killed with Dyſenteries, have been recovered: Alſo Rice boyled in Almond milk. And if Steel or Gold be quenched in the Milk, it is the better.

Alſo Starch boyled with Eggs beaten, and with Roſe-water, Sugar, and Butter, or Veal ſuet, is good.

Alſo Milium boyled in Milk, with yolks of Eggs, or drink the pouder thereof, with a roaſted Eg.

Oate-meal, or the Grewel made thereof is uſed in *Germany*.

To theſe Papps of Rice, Oats, Starch, Milium, you may add Bean flower, Tormentil roots, ſeeds of Plantane, Sumach, and Bole.

Or two drams of Virgins wax ſliced and boyled in the ſame.

Bread alſo made with whites of Eggs, Pouder of Galls, or Pomegranate peels, is good to be given in Pouder, with Wine.

Dioſcorides commends Beans boyled in Vinegar and water; others commend Lentils.

Alſo Eggs poached in Vinegar or fryed, till hard, with one dram of new wax, to which may be added pouder of Sumach, Plantane ſeeds, or Hemp.

The Blood of a Goat or Dear fryed, is commended by *Dioſcorides*. And chiefly that *of an Hare, with Barley-meal, alſo a roaſted Turtle ſtuffed with Myrtle-berries, and new Wax, each two drams; or two drams of Frankincenſe, and one dram of dryed Pigeons blood, and other Aſtringents, as Plantane ſeed, Roſes, Sumach, and Cinnamon.*

Among Fruits, Quinces, Pears, and Apples that are ſharp, roaſted, or boyled, are the beſt: Alſo ſweet Meats made thereof. Or roaſt a Pear, or Quince, with Wax, and let him eat it.

Alſo Medlars, Services, Cornil-berries, Cherries, and ſharp Plums before they are ripe, are aſtringent.

Alſo Goos-berries are aſtringent, and Bramble-berries. And Mulberries, but they cauſe pain, and therefore are to be uſed warily.

Dioſcorides commends the Berries of the Lote-tree, and Bar-berries, and the Huskes of Beans.

Alſo roaſted Cheſnuts, and Acorns, with Almonds not roaſted, but theſe will clog a weak Stomach.

Purſlane is the beſt pot-herb for a Dyſentery, it takes away the ſharpneſs.

There are divers Pouders which dry and bind, or have a ſecret quality, given alone, or mixed from one dram to one dram and an half, commonly with ſharp red Wine, or with ſteeled Water, Broath, or Milk, Plantane water, or the like, with Sugar, Honey, or proper Syrups.

The Pouder of the Roots of Tormentil, Snakeweed, are not ill-taſted. Water-lilly roots do wonders in Dyſenteries: Alſo Comfrey roots, wild Sage, and Avens roots.

Diſco-

Dioscorides commends the Pouder of Yarrow, Fleabane, Scordium, and the tops of Tragus; also Mouſear, Cudwort, Sun-flower with the Roots, the middle of the root of Mullein, Horſtayl, Balſamine, or the like, mentioned for Decoctions.

Flowers of Ivy, Ciſtus, Palma Chriſti, Flower gentle, and Pomegranate flowers. Alſo red Roſe cakes: Alſo the Fruit of the Roſe, with its down and ſeeds, and Bar-berries.

Roaſt a Pomegranate, and give it in Pouder.

Alſo Seeds of red Roſes, Pomegranates, Raiſons, Grapes.

Seeds of Water-creſſes alone, or with others, is counted an excellent Remedy againſt a Dyſentery, and becauſe they are ſharp and burning, they are firſt parched. Alſo Tamariſk ſeed.

The Seeds alſo of Docks, and Bloodwort, or Sorrel.

The Pouder of roaſted Acorns doth wonders. Alſo of Cheſnuts, or of Beech maſt.

The Down of Cheſnuts within the ſhell, as alſo of Acorns, and Hazel-nuts, is good in pouder.

Frankincenſe, Maſtick, Myrrh, Traganth, ſwallowed or drunk in pouder.

The pizle of a Dear alſo poudered, and drunk in wine.

Alſo burnt Harts horn, or unburnt, and the pouder of Ox ſhanks.

The Runnet alſo of a Hare, or Kid, or Mare, is commended by *Dioſcorides*.

He alſo preſcribeth Goats ſuet, with Barley-flower, and Roſes.

Alſo Hares, Dogs, or Swins dung, is given with Milk that hath had Steel quenched therein.

Alſo Bole, or other fat Earth, as that of Lemnos, red Coral, Cryſtal, Pearl, Sapphyres, Smarag'ds.

The Chymiſts commend the tincture of Smaragds, as ſpecifical in a Dyſentery: It is thus made. Let the ſparkes or pieces of Smaragds be ground finely upon a Marble, with the Urin of a Boy, or diſtilled Vinegar, or Juyce of Lemmons, and the tincture drawn out at the fire. And then let it be evaporated, till it be a grey pouder, then draw out the green tincture with ſpirit of wine, and then evaporate the ſpirit of wine, and let it be brought to an Eſſence at the bottom; two or five tops of this they ſay, taken with Plantane-water, cureth Dyſenteries miraculouſly.

Some give Allum with an Eg.

And *Dioſcorides* gives Salt with red Roſe ſeeds for ſauce with Meat.

There are divers Pouders compound of theſe, to be given in the like quantity, or with Sugar in a greater quantity, with a Sop in Wine.

The firſt is: Take *Roots of Tormentil two drams, Snakeweed one dram, Seeds of Docks and Sorrel, each one dram and an half; red Coral half a dram.*

Another: Take *half of this Pouder that is three drams, Seeds of red Roſes and Myrtles, each one dram; Pomegranate flowers, burnt Harts horn, or Ivory, each half a dram; Pearl half a ſcruple.*

The third Pouder more aſtringent. Take *with the former Galls one dram, Sanguis Draconis, or Acacia half a dram, Bole, or Terra Lemnia one dram, and half a dram of Bloodſtone which is ſtronger.*

A Pouder of Acorns which bindeth and healeth wonderfully. Take *roaſted Acorn kernels one ounce, Coriander ſeed prepared one dram and an half, Purſlane and Fleabane-ſeed, each half a dram*; you may add *roaſted Cheſnuts.*

If you will heal more, mix *Starch one dram and half, Gum Traganth a little parched one dram.*

And if you will dry and aſtringe more, mix it *with a dram or two of the former Pouders.*

Aſhes alſo are highly commended, as of a quick Hare, burnt in an earthen pot well ſtopped.

Land-turtles, or Snails alſo burnt with their ſhells.

Alſo Pouder of Mans bones, or aſhes in red wine, or ſteeled wine.

Theſe may be mixed with other Pouders, as Bole, Dragons blood, and Mummy, with pouder of Turtles, or pouder of Galls, with aſhes of a Turtle, and a little white Pepper.

Alſo theſe Aſhes following. Dip a hempen Cloath in two parts of Plantane-water, and one of Roſe-vinegar, in which a little Allum, and Bole are diſſolved, then dry it, and burn it to aſhes.

Alſo the Troches of Amber, burnt Ivory, or ſealed Earth, with Sorrel ſeeds, Ramich *half a dram*, taken every day: Give in pouder, with red Wine, or other proper Liquor, Sugar of Roſes, or convenient Syrups, or with old Conſerve of Roſes, or Syrup of Myrtles: make Pills or a Bolus.

Theſe Electuaries following are made of Conſerves and Candyes. Take *old Conſerve of Roſes, and Marmulate of Quinces, each one ounce; Conſerve of Comfrey roots half an ounce, Coral two drams, Troches of ſealed Earth, or the like, ſimple or compound one dram, parched Nutmeg and Cinnamon, each half a dram; Sugar of Roſes*, as much as will make a Mixture.

Or, Take *the Conſerves and Candyes mentioned, with thoſe of Services, Cornils, Roſes, Medlars, and other Aſtringents, Pouder of Rhubarb parched one dram*; mix them *with ſyrup of Quinces, or Juyces or Syrups mentioned.*

Micleta Nicolai of Myrobalans, Maſtick, Gum Arabick, Sumach, Pomegranate flowers, burnt Ivory, Water-creſſ-ſeeds, and others that expel wind, is good in Dyſenteries, and other Fluxes.

Two drams of Water-creeſs-ſeeds parched, and poudered, boyled in Syrup of Quinces, till they be thick, and three ſpoonfuls given at once, is excellent.

Another that leniſieth and healeth. Take *Mucilage of Quince ſeeds, Comfrey roots, Infuſion of Gum Traganth, all made with Roſe-water one ounce, Starch one dram, red Coral two drams, Bole one dram, Pomegranate flowers half a dram, Juyce of Services, Cornil-berries, or Marmalade of Quinces two ounces, Sugar of Roſes one ounce*: make an Electuarie, give *two drams.*

Narcoticks as we ſaid in Clyſters, aſſwage pain and ſtop Fluxes, and they do better taken at the Mouth, cauſing reſt and ſleep, which the Dyſentery hindereth, and ſo do increaſe ſtrength: theſe are to be given as oft as pain and watching require, for nothing doth better allay the expulſive Faculty,

Philonium Perſicum is beſt, *one dram*, and a little more.

Alſo pills of Dogs tongue called *Cynogloſſ*, ſtay Defluxions, and are good with Juyce of Plantane and Roſes, and other aſtringents from *half a ſcruple, to a ſcruple.*

Troches of Amber, with Opium, do alſo cure Ulcers, and other Narcoticks, mentioned in the Colick and Stone, here are good, if mixed with aſtringents, as you mix Syrup of Myrtles, with ſyrup of Poppies, or Diacodium, and diſſolve them with plantane-water, and add a little Diamargariton frigidum, or boyl white poppies in Roſe-water.

Or mix Bole, Terra Lemnia, Galls, Pomegranate-flowers, Acacia, Hypociſtis, with Treacle, Mithridate, Athanaſia, with the like Confections, or Narcoticks.

Or if you add to the Pouders and Electuaries mentioned, a little Opium well prepared: As we ſhewed.

As for external Medicines, anoint the Belly with Oyl of Quinces, Myrtles, Roſes, or Oyl omphacine, if you will bind more, or add the third part of Vinegar, then boyl them till the Vinegar is conſumed. And if the Stomach be diſordered, add Oyl of Maſtick, or Wormwood. If the pain be great, add Oyl of Chamomil, or ſweet Almonds, if there be Inflammation or Heat, Oyl of Violets. Some anoint the Fundament with theſe.

After anointing, ſprinkle theſe pouders following.

The firſt: Take *Myrtle-berries, or Bar-berries, or Grapes, or Raiſon-ſtones, half an ounce, Galls, or Pomegranate peels, Cypreſs-nuts, or Acorn-cupps, each two drams; red Roſes, or Pomegranate flowers one dram and an half, Maſtick, or Frankincenſe one dram.*

Ano-

Another stronger: Take *the Pouder mentioned, half an ounce, Bole two drams, Sanguis Draconis, Acacia, or Hipocistis, each one dram; Sumach one dram and an half, red Coral burnt one dram.*

The third is made of the troches of sealed Earth, or of Bole, or Amber, with other Astringents.

Of these pouders is made an Oyntment, with proper Oyl and Wax.

Also an Emplaster with astringent Oyl, Rosin, and Pitch, with Aloes, and Varnish, *each two drams.*

Or this astringent Plaister. Take *Bole six drams, Frankincense half an ounce, Dragons blood, Mastick, Mummy, each two drams; with white of an Eg, and Vinegar,* make a Plaister, and tye it under the Navel with a Clout.

This Cataplasm is excellent. Take *green Quinces or dry as they are kept, or Pears, or other Fruit that is astringent, pulped four ounces, the Crust of bread burnt and often sprinkled with Rose-vinegar at a time two ounces,* boyl them *in red Wine, Oyl of Roses emphacine,* beat them, and add *Pouder of Galls six drams, Bole, Mastick, each half an ounce; or one ounce of the compound Pouders mentioned.*

Instead of these, apply Mullein, and the Roots, Shepheards-purse, Plantane, Comfrey roots, red Roses boyled in Oyl of Roses, and beaten up with the pouders mentioned.

The Cawle of a Weather, or Goat, or Lamb, applyed hot, as is said in the Colick, doth take away pains in Children. And it must be taken anointed with Oyl that is astringent, as of Quinces, or Myrtles: Or add pouders of simples mentioned, or pouder of Mullein. Cumminseed steeped in Vinegar, and parched, and applied to the Belly, doth the same.

Also the Emplaster of *Mesue* called Diaphænicon.

Also a Rowler steep'd in Vinegar, and bound about the Belly.

Also Cupping-glasses applied to the Navel, or Center of the Belly, or on both sides, about the Groyns, are good to stay a great Flux.

Foment the Belly and Fundament with a Decoction of astringent Herbs, as of Mullein with the Roots, Plantane, Solomons-seal, Oak leaves, Pears, Quinces, Services, Cornil-tree, Myrtles, Bar-berries, red Roses, Pomegranate flowers, Sumach, Fern roots, white Chamelion, Pomegranate peels, pine-nuts, Acorn-cupps, Galls, Myrtles, Grape seeds made in red Wine, Vinegar, and steeled Water.

You may foment the Belly with the Oyls mentioned, to anoint, adding a little Vinegar, and Juyce of proper Herbs.

Dioscorides adviseth that the Belly be anointed with the Broath of a Sheath-fish, River-whayl. And to wash the Feet in the Decoction hot, before mentioned, is good.

And it is as good, if they be washed with a Decoction of Steel, or Iron, in strong Vinegar.

'Tis also good to let the Vapour of these Fomentations be taken up into the Fundament, or the Vapour of the decoction of Eels.

Also a Fume of those Rosins mentioned in Tenesmus, burnt upon Coales, or hot Iron; or of the pouder of Mullein; or dryed Asses dung, or the Fume of strong red Vinegar, after a red hot Iron is quenched therein, in which Vinegar you may boyl the astringents.

The Suppositories mentioned in Tenesmus, as that of Suet, which allay pain, are also good.

It is good after stools to cleanse the Fundament with Mullein, or Haresfoot leaves, which are soft, and strengthen: And also with Marsh-mallow leaves.

As for Diet: Let the Meat be of good Juyce proper for the Disease, as Milk, Eggs, Papps, and the like; Or boyled in Iron-waters, or Rose-water, with the Pouders and Juyces mentioned. Let the Drink be steeled Water, or Almond milk, or red Wine mixed with steeled water. Let all salt, sharp, and sour things be avoided.

Let the Patient be at rest, and not move from Bed, but void the Excrements with a Bed-pan, or the like.

And if there be another Disease joyned therewith of the Liver and Spleen: then if the Choler come from the Liver, or there be a Flux of the Liver, which is most to be feared, and is deadly; the Liver must chiefly be regarded, and Epithems, and Cerots proper, must be applied, mentioned in the Flux of the Liver.

And if there be pain and weakness of the Stomach, you must mix things proper for it, with other astringents, as Mastick, Roses, Wormwood, as are mentioned in the weakness of the Stomach.

The Cure of the bloody Flux without ulceration.

Other bloody Fluxes are from the opening of the Meseraick veins, (besides the Dysentery and Liver-flux) with an Inflamation thereupon: And are like a Dysentery, only there is no Ulcer. Yet are they not so obstinate and dangerous as a Dysentery, if the Inflammation be abated. And they sooner vanish then a Dysentery, if they be well ordered. But if the Inflammation and Feaver increase, they die of Convulsions through pain, as in the Colick. Or if they tend to Impostumation, they are changed into a true Dysentery, which leaves a filthy Ulcer from which matter is voided by stool. In the Cure of this Disease, the cause which provoked it, if it persist, must be removed, with the same Emptiers and Cleansers, as in a Dysentery, only they must be milder, in regard of the Inflammation. And Coolers must be used as in a Dysentery, with Inflammation, and the Colick. Then you must have regard to the Meseraicks, the Inflammation being gone, and stop the Flux, with such astringents as are mentioned in the Dysentery. And if the Inflammation tends to an Impostume, and so to an Ulcer, then use the things mentioned in Dysenteries for Exulceration.

The Cure of clotted blood voided by stool.

If much clotted Blood that is black be voided from the opening of the vessels, by reason of strong purging, or the like, or by vomiting, it is dangerous: And we have known some die suddenly thereby. For the Cure thereof, you must use such things inward and outward: As we mentioned in Vomiting of Blood.

The Cure of Tenesmus.

A Tenesmus is less dangerous then a Dysentery, because the Cause is in the end of the Guts, which may be easily reached with Medicines, only the difficulty is caused, and the cure prolonged, by the pricking and provoking to stool, which will not let a Medicine be retained, though it be gentle; and by the foulness of the Ulcer.

The end of curing is according to the diversity of the cause. For if it be the first kind of a tenesmus with ulceration, and voiding of slimy matter with blood, or if it come of it self, or follow a dysentery; in regard the ulcer is in the strait Gut, it must be cured as a dysentery, with the like medicines. But if only Irritation produce the other kind of tenesmus, in which the Excrements are cholerick and sharp, the remedies must be such as abate the sharpness and heat, and then such as cleanse and heal. In the third kind of tenesmus, where there is needing without Excretion, you must remove it with respect to the cause, as if it come from hard Excrements, they must be mollified, if from cold, the part must be warmed. If it come from a Stone in the Bladder that passeth the Gut, or from worms, or from the passage of the Bladder: the cure was shewed in those diseases. In other causes you must use these remedies following.

Purges are seldom given, because the Humor that causeth it, is in the extremities of the Guts; except they be to take away the antecedent cause, which may increase the disease. And then use such as are prescribed for a dysentery, if there be an ulcer, such as purge and bind. If the cause be otherwise, use other Evacuations, such as are gentle, least the belly be provoked too much.

Things given at the mouth, can have but little operation

on open the Guts which are so remote; yet if they be given in great quantities to lenifie and heal the Ulcer, or often, their vertue will reach to the part. As Milk, or Barley water drunk much and often. The Decoction of Bettony, and Sage, mentioned against the tenesmus.

Clysters are chiefly given in this case, because they come near to the part affected, and wash it; and that they may be long kept, they must be little in quantity, and be given often with care that the pipe offend not.

Lenifying Clysters are good in all sorts of tenesmus, whether the part be corroded, ulcerated, or provoked by straining and pain, to mitigate the pain, and allay the sharpness. These were prescribed in Dysentery, of Milk, Decoctions, and Oyls, as you will have them cleanse or heal.

If there be a stinking Ulcer in tenesmus, or pricking from slime, you must use cleansing Clysters: As in a disentery of Whey, Water, and Honey, Barley-water, and the like.

Healing Clysters are only used in tenesmus from ulceration, made of things mentioned in a Dysentery.

Turpentine unwashed or washed in Plantane water, or Nightshade water, put into these Clysters, makes them cleanse and heal better.

Mollifying Clysters are used in a tenesmus, when the Excrements are hard. To which you may add Laxatives, if there be a needing, and no voiding of stool. If the Humor be cold, or caused by cold or wind, use things to heat and discuss wind, and things gently warm do also asswage pain. When we will mollifie and loosen, we take the decoction of the five mollifying Herbs, Line-seeds Fœnugreek, with Oyl and other Fats that loosen. If we will heat, and expel wind, we use hot Herbs, as Organ, Calamints, both Penny-royals, Baulm, Hyssop, Sage, Marjoram, Bay leaves, Rue, Flowers of Chamomil, Melilot, Dill, Rosemary, Stœchas, or French Lavender, Caraway, and Fennel seeds. Such Clysters are mentioned in the Colick from Excrements, Wind, and Cold.

In every tenesmus you may use Suppositories to abate pain, and then such as cure Corrosions and Ulcers, if they cause it: these must do good to the part which they touch, if they can be retained, for the part is so sensible, that it is provoked by the touch of any hard thing, therefore the Suppositories must be gently made of these following.

Goats suet made like a Suppository, takes away pain and Excoriation.

And it is better, if you first melt down the Suet with Poppy, and Henbane seeds, and then cast it into a mould like a Suppository, to take away pain. And also if you put some drops of Oyl of those Seeds, *or half a scruple* of Opium dissolved in Oyl of sweet Almonds.

And it will heal better, if you add Starch, or Gum traganth poudered or infused in plantane-water.

Or thus, infuse a little Gum traganth in plantane water, let it not be too thin, and mix it with Mucilage of Fleabane, or Quinces, and the yolk of a roasted Egg, and while they are hot, with a little white Wax: make a suppository, if it be too soft, dip Cotton, or Silk therein, and apply it. To these you may add the Narcoticks mentioned.

To these pouders may be added to cure great Corrosion, but they must be very fine, least they offend. As of Ceruss, Tutty prepared, Bole, Pomegranate flowers, and other dryers that are not sharp.

If you will astringe more, add the Juyce of Sloes, Dragons blood, with the Infusion of Gum Traganth.

Rhasis makes a healing and anodine Suppository of Lycium, which is the Juyce of Brambles.

When the Excrements are hard, use mollifying Suppositories and Laxatives, with hot things to expel wind: As we shewed in Clysters for the Colick. Some are made of Labdanum, and Storax, with hot Oyls.

The Fumes and Vapors mentioned for a dysentery, are good here. Besides which, make Fumes of strong dryers that smoak much, as of Pitch, Bitumen, Amber, Colophony, Turpentine, Rosin, Sarcocol. Some add a little Brimstone, and steep them first in Vinegar.

If you must heat more, use the Vapour of the Clyster there mentioned, or the Fume of Savine, boyled in Wine, and Vinegar.

You may make a Fomentation to heal the Ulcer in Tenesmus of Plants mentioned in the Dysentery, or a Bath.

A Fomentation of the Decoction of Myrrh, cureth a tenesmus that follows a dysentery.

If much Blood be voided. Take *Mullein, with the Roots, two handfuls, red Roses one pugil, Pomegranate peels, and Galls, each half an ounce*; boyl them *in two parts of Iron-water, and one of Wine.* You may add *half an ounce of Pmegranate flowers, or of Pine barks.*

It is stronger with *half an ounce of Allum.*

To heat, you may make Fomentations of Plants in the Clysters mentioned, for the Fundament, and lower parts of the Belly: And they may sit in the same. To which, if there be Corrosion, we add Plantane, and Mullein, or Mullein only boyled in Wine, if the Hæmorrhoids be open.

Or foment with warm Water, Oyl, and Wine, or Oyl of Chamomil, Dill, Rue, &c.

Use the Oyntments mentioned for Ulcers in the disentery.

When there is great pain in Tenesmus, anoint with Oyl of Roses, Violets, Water-lillies, Mucilage of Fleabane, yolks of Eggs, or the like, mentioned in the Hæmorrhoids.

If you must heat, use Oyl of Chamomil, Dill, Bayes Rue, and the like.

You may make Cataplasms of the same Ingredients.

A warm Anodine bag is made of Milium, Bran, and Salt, fryed with hot Herbs dryed.

In an Ulcer make it of astringents, as Coriander seeds, Myrtles, Acorn cupps, Galls, and other Herbs, mentioned in the Fomentations for a Dysentery. And let him sit upon the bag boyled in red wine.

A Brick that is black with Smoak, beaten, and steeped in wine, and put into a cloath, is good to be applyed to the Perinæum and Fundament, when there is an Ulcer.

Let the Patient sit upon hot Mugwort.

Also warm Cloaths applyed to the Fundament and Perinæum, are good to abate pain.

The Cure of Diarrhæa.

If a Diarrhæa be a Flux of filthy Excrements and Humors, by Medicine or Nature, which takes away the plenty of them, it must not be stopped, neither in those that are found, because it preventeth Diseases; nor in those that are sick, from plenty of humors, and evil Juyce; nor in the beginning of acute Diseases, for as *Hippocrates* shews if things which ought to be purged, be purged, and the Patient endures it wel, it is good. Nor in the declension or Crisis of a Disease, which sometimes is cured thereby. But it is to be stopped if it happen in sound and pure Bodies, especially if there be an over purging. And in sick, when it is provoked, or comes of it self, when it will not cease, and takes not away from the cause of the disease, but weakneth. As in internal Inflammations, Pleurisie, Peripneumony, and in some acute and malignant pestilential Feavers: and others that weakens, as in Hecticks, Consumptions, Dropsies, with which it is deadly. In all which we must prevent it, or stop it, foretelling the danger.

Observing first, if it be alone, without other diseases, with it, or after it, whether it came from an over purging Medicine, or too much meat and drink that is crude or corrupt, or from Choler, or sharp humors or water. Then we must evacuate the cause, and abate the pricking. Then we fortifie and bind the Stomach and Guts, with hot, temperate, or cold things, as the cause requires, as followeth.

The Stomach and Guts are to be purged with gentle things, least the Belly that is already moved, should be

too much troubled. And if the tumor be water or flegm with pills for the Stomach: As these of Mastick, and Assareth, and others in the Lientery.

Or give *six drams of the Electuary of Hiera, or two drams of the Powder, with one ounce of Syrup of Vinegar,* to take off the bitterness, all dissolved in *Wine and Water, or Liquor convenient, or sweet Wine.* But Pills of Hiera are better taken.

There are other purges to be taken in wine, mentioned in Lientery and Weakness of the Stomach.

If the Humor be cholerick and sharp, use Remedies for the Dysentery there mentioned.

As a Potion of Rhubarb parched or not, or the Infusion thereof, with Wormwood wine, or Syrup, or that of Mints.

Also you may make a Potion of the Infusion *of half an ounce* of yellow or chebs Myrobalans, or *of two drams* of Myrobalans, *and one dram* of Rhubarb.

Or give *two scruples* of the Pills of Rhubarb, made with *one scruple* of Mastick, and *half a scruple* of Spike, with Juyce of Roses. Or a bolus of the same, with Conserve of Roses, or Quinces, or the Pouder of Rhubarb, with Cinnamon, and Sugar of Roses, and Myrobalans; if they make not the Medicine too large.

If you must purge in a Diarrhœa, use the troches of Roses, burnt Ivory, Barberries, the cold great Seeds, with Diagredium.

The Tryphera Saracenica *Nicolai*, is given in *six drams*, when there is plenty of Humors, or so much Catholicon in potions of Myrobalans, and Rhubarb, it is not safe to use stronger Remedies to purge in this Disease.

A Vomit sometimes is good to revel, and take away the cause, as in a Dysentery. Also Sweating, especially when it comes from much water. And if strength will suffer, use them often, moderate fasting, is also good to hinder the increase, and to consume Humors, but in people of sharp, cholerick Constitutions, it hurteth.

All Clysters are good that have astringent qualities, though they be presently voided.

The fourth Clyster mentioned in a Dysentery, is good here, it is a strong astringent, to the Decoction of which you may add also other astringents; as Juyce of Plantane, Bloodstone, or drying Earths. And if the humor be sharp, and threaten Excoriation, you may give the third Clyster there mentioned, to astringe and heal.

But before, use Cleansers, if the Humor be sharp and cholerick, and fret the Guts.

And you may mix other things, if there be other Humors; as Wormwood, Centaury, and in a phlegmatick Cause, against pains and noise of wind, things to expel wind, as Fennel, and Anise seeds, Chamomil, Melilot, and Dill flowers, or Oyls thereof.

If the Humors fret the Guts, use Lenitives, or when a ..dent purge hurts them, they are mentioned in Dysentery: As that which begins thus. Take *Marsh-mallow-roots one ounce, Barley, &c.*

Medicines must be given in divers forms, twice or thrice in a day, especially that bind, or that cleanse and lenifie, least Nature being accustomed to one, should be no way moved thereby.

Dioscorides commends divers Decoctions in wine and water, as of Maiden-hair, golden Locks, Marsh-mallows, Brambles, Cinquefoyl, or five leaved grass, Piony.

Also wine of the Infusion of dryed Sloes, and the like, Moss of a tree, Wormwood, Snakeweed, Citron peels, and the like astringents.

Also Juyce of Plantane, Solomons-seal, Horstayl, Gum Succory, Quinces, four Pomegranates.

Also Syrup of Quinces, Myrtles, red Roses dried, Barberries, Currance, with the waters following in Juleps.

Waters of Plantane, Roses, Sorrel, Shepheards purse, Services, Sloes, Oak leaves.

Or the Decoction mentioned in Dysentery. One begins thus: *Take Tormentil roots one ounce, Comfrey roots &c.*

Another thus: Take *Roots of five leaved Grass, or Snakeweed, &c.* Of which you may make Syrups.

Or make a Syrup of the Juyces to be kept. Take *Juyce of Quinces, three ounces, of Bar-berries two ounces, Juyce of Plantane, or the like, one ounce and an half, red Wine, and Rose-water, each two ounces; Sugar four ounces:* boyl them *to a Syrup, and add a little red Sanders,* it is better, if *two drams of Juyce of Sloes,* and in a cholerick Cause *a little Rose-water* be added to make it sharp.

The Syrup of *Nicolas* of the Decoction of Fruits, and the like, is good in all Fluxes of the Belly.

Also this distilled Water. Take *Yolks of Eggs boyled hard twenty, Nutmeggs parched a little, two ounces,* infuse them *in red Wine.* Let them stand a while, and then distil them according to art: the dose is *one or two ounces.*

Let his Meat be boyled in steeled water, with Sumach, or other things that bind, and are not unpleasant, as in a Dysentery.

Let his Broath be seasoned with Juyce of Quinces, or the like.

Let his Meat be thick, and not thin.

A Turtle prepared, as in a Dysentery.

And fryed Blood,

Steeled Milk of Cow, or Sheep, as in a Dysentery.

Yolks of hard Eggs, with Vinegar.

Take out the white of an Eg at a little hole, and fill it with Rose-water, stop it well, and boyl it till the water be consumed, and let him eat the Yolk, or drink it in Broath.

Also the Husks of Milium, with a roasted Eg,

Or an Eg and Wax.

Or Cheese boyled in Milk or toasted, which is the Helvetian Medicine, and commended by *Dioscorides.* Let the Bread be wheat, not new, nor mouldy.

Or made of Starch, Bean flower, and Eggs, with Plantane seed. Or of Barley, and Rice, with Yolks of Eggs, which well dryed, will keep long, and may be taken in Milk like pap.

Other Bread is made of Barley meal, with Juyce of Elder-berries, dry baked, give *one spoonful,* with red wine.

Rice boyled with steeled Milk, or Broath, with Gum Traganth, or Arabick.

Also Starch with Almond Milk, as in a Dysentery.

Also Pap of Oat-meal, Milium, and boyled Lentils, with Vinegar, and other Astringents, and with Beets, as *Dioscorides.*

Medlars, Services, Cornil-berries, wild Pears, green or dry.

Boyl Coleworts, Beets, with the Roots, plantane, Endive, Smallage, and with Vinegar, eat them.

Let Meat be seasoned with parched Cloves, and Vinegar.

Let him drink Barley-water, or steeled water, with the pouders, in a Dysentery.

The chief Roots are Marsh-mallows, Tormentil, which is good against poyson, Horstayl pouldered and drunk in wine; also Leaves of Harefoot, Dock seeds, and of Sorrel, plantane, Water-cresses parched with Mastick, and Gum Traganth.

Pouder also of pease, Earth-nuts, Hyacinth, Brank ursine, water-plantane, Tamarisk, Mullein, Rasberries, barks of Tamarisk.

Leaves of Burnet, Strawberries with the Roots, winter-green, Mouse-ear, golden Rod, Lungwort, perwinkle, Alkanet, Lentils, Harts-tongue, Housleek, Dates, Rue, wild Basil, Dill, Anise, Fennel.

Flowers of wild Vine, Mullein, Indian Milium.

Stones of Myrobalans burnt, Nut shells, parched Nutmeggs, Cloves, Coriander seeds, Huskes of Milium, Dill, and pomegranate stones, Hares Runnet, Dogs dung, and Harts horn.

Bole, Earth of Armenia, Crystal, Pearl, Coral, Gum Arabick, Traganth.

Also troches of Ramich, and *Mesue* against Fluxes, of sea-

sealed Earth, Amber, burnt Ivory, with Sorrel seeds, given as in a Dysentery, or in pills: Also Diacoralium.

A pouder with Rhubarb. Take *Rhubarb parched one dram and an half, Bole, Bloodstone, each one dram; burnt Stones of Myrobalans, Amber, each half a dram*; make a pouder: or make pills of it, *with Gum Traganth, infused in Rose, or Plantane-water*: Give *a dram*.

Add Cordial pouders, if strength fail, as Diamargariton frigid de Gemmis, Trionfantalon, Diarrhodon.

Or thus: Take *roasted Chesnuts, or Acorns half an ounce, the Rines of yellow and chebs Myrobalans parched two drams, Coriander, and Water-cress seeds steep'd in Vinegar and torrified, each one dram and an half; Myrtle seeds, Sumach, Medlars, sour Pomegranates, Barberries, Roses, Plantane, and Dock seeds, each one dram and an half; Cummin seeds steeped in Vinegar, Frankincense, or Mastick, each half a dram; red Coral two drams, Bole, Bloodstone, each one dram, burnt Harts horn half a dram, Pearls, or precious Stones one scruple, Acacia, or Juyce of Sloes one dram*: make a pouder. Give *one dram* by it self, or *with Sugar*, or make an Electuary thereof.

Diacydonites, in a cold cause with the species, in a hot cause without, is given by it self, or with other things, as an Electuary, or pouder, with Sugar of Roses, *from one dram and an half, to two drams*.

Old Conserve of Roses, Galangal, Comfrey, and other cordial Conserves, or Marmalade of Quinces, Citrons, Myrobalans candied, are given alone, or with the pouder of troches for that purpose.

Micleta, or the Electuary of *Nicolas*, is given in a Diarrhœa, and other Fluxes, as in a Dysentery, where the way to make it, is declared.

The Electuary also of *Mesue*, of Myrobalans, Myrtle-berries, Anise, Cummin, and Smallage seeds, with syrup of Quinces.

I think it fit not to let pass unmentioned, the Electuary of smaragds, which is excellent in the Falling-sickness, and in Dysenteries, and Diarrhæ's, and to stop all Fluxes, it is thus made.

Take *Smaragds well prepared one dram and an half, Piony seeds husked, and the Extract of the Roots of Piony, each two drams; red Coral prepared three drams, Salt of Coral one dram, Wood-Aloes well powdered, two drams and an half, the Extract of Saffron eight grains, of the best Cinnamon, Sorrel seeds, Citrons, Purslane, Dock seeds, Misseto of the Oak, Cuchenell, or grains of Kermes, each two drams; Pearls prepared four scruples, Salt of the same one dram, Harts horn, Philosophically prepared four scruples*: mix them *prepared exactly with syrup of the Juyce of Citrons, or Quinces three ounces*, and let them ferment in the sun, or by the fire, and keep it close stopped for use.

Narcoticks, as in Colicks, so in Diarrhæa's mitigate pain, and stupefie the expulsive Faculty, which stayes the Flux. And they must be used as in a Dysentery, with astringents proper.

Outward Applications do better in a Diarrhæa then a Dysentery. And Clysters do better in a dysentery, by reason of the Ulcer internal; which the stomach is afflicted with cold, things to be mentioned in Lientery, are good: but in a hot Diarrhæa, things to be mentioned in a Dysentery, are good.

The same Oyls are to be used here, as in dysentery. And if the stomach be afflicted, use the things mentioned in a Lientery.

Or anoint the stomach and belly with this. Take *Oyl of Myrtles, Quinces, Roses omphacine, each one ounce and an half; Oyl of Mastick one ounce, Wormwood, and Nard Oyl, each half an ounce; Juyce of Plantane, and Shepheards purse each one ounce and an half; Vinegar of Roses one ounce*: boyl them *till the Juyces are consumed, with Wax*, make an Ointment. And either mix therewith, or sprinkle upon it after anointing some of the pouders mentioned for a Dysentery. To which you may add *Nutmeg two drams, Sanders one dram, Galangal, or Cypress, Coriander seeds, Storax, each half a dram*; Dioscorides mixeth *Wine Lyes therewith*.

Fomentations and Baths are made of tormentil, snake-weed, five leaved Grass, Calcatrippa, or prickle Herb, Fern, Mullein, Plantane, Horstayl, shepheards purse, Knot-grass, Bramble leaves, Barberries, sumach, Mastick tree, with Wormwood, and Mints for the stomach, Cypress-nuts, pomegranate peels, Myrtle berries, Water-cresses, Roses, pomegranate flowers, spunge boyled in red wine, or steeled water, with a little Vinegar, and Allum added.

You may make a bag of some of the same, or two to be changed, and applied to the belly, after boyling.

Use the Vapors and Fumes for a Dysentery mentioned.

Make a Cataplasm of the remainder of the Fomentation, with the Oyls mentioned, Goats suet, Bran, starch, or Bread, with pouders mentioned.

Or of the Juyce of the Herbs mentioned; or of astringent Fruits, pears, sour Apples, sloes, Quinces, services, Medlars, Cornil-berries, Barberries, with Bran, or Bread, Oyls, and the pouders aforesaid.

The Emplasters and Cataplasms mentioned in a Dysentery, are good in a hot Diarrhæa, and those for a Lientery in a Cold.

Or this: Take *of the astringent Fruits mentioned, well dryed, four ounces, Barley meal two ounces, fryed in Vinegar, Roses of Snakeweed half an ounce, Horstayl, Wormwood, Mints, Pomegranate peels, Galls, Myrobalans, Cypress-nuts, each two drams, Myrtle berries, Grape stones, Coriander prepared, Cummin, Water-cress seeds torrified after they are steeped in Vinegar, each one dram; Frankincense half an ounce, Mummy, Acacia, Dragons blood, each one dram and an half; Bole, Bloodstone, each one dram; Nutmeg two drams, red Sanders, Cloves, each one dram; Spikenard half a dram, old Cheese, and Glew of Fishes*, pouder them, and mix them *with red Wine, and Juyce of Herbs proper*. And let them be fryed and beaten *with Oyl of Mastick, Roses omphacine, each two ounces and an half*: make a Cataplasm, *or with Wax, and Pitch, Colophony, and Rosin, a Plaister*.

The usual Plaisters are of Gallia moschata of *Mesue*, Mastick, Diaphœnicon, that against Ruptures, Ceratum santalinum, with strong astringents.

Also the Cawle of a Weather, with Oyl of Roses omphacine, or others, may be sprinkled with the pouders.

And a Cupping-glass applied to the Navel.

Also wild tansey applied to the Feet.

Let the Fundament be wiped with Mullein leaves.

It is excellent to heat the Feet, either actually or potentially, to stop Fluxes, especially when a diarrhæa comes from cold of the Feet, or other parts. Or when Flegm or water washeth and cooleth the Guts; or when cold is taken by sitting upon a cold stone, then the part must be warmed.

If another disease be with a diarrhæa, which is not mixed with it, or the cause thereof, then cure it distinctly, and look first to that which is worse. But if it be the cause of a diarrhæa, then take that away first: and then if it yeeld not after the cause is removed, proceed thus.

The Cure of a Diarrhæa, meeting with a Defluxion.

If a Catarrh or Defluxion meet with a diarrhæa, you must use medicines for both, especially when a salt or sharp water flows from the brain to the stomach, then first look to the defluxion, and after to the diarrhæa. As for the defluxion, it is not good to purge with strong medicines, but with particular Evacuations by the Nose and Mouth, and diversions, as washing of the Feet hot, which is good for both, if the decoction be made of Head medicines and astringents. Also by Frictions, and Cupping glasses. Then strengthen the Head with Pouders, Capps, Emplasters, and Fumes: Of which there are divers Forms in defluxions, mentioned in Cephalæa, sleeping Apoplexy, and Palsie.

But for the diarrhæa, you must purge the stomach from flegm, gently, and then strengthen it, and apply astringents;

gents: as we shewed in a flegmatick Diarrhæa and the Lientery. Making choise of things for the Head: as many astringents are, Nutmegs, Galangal, Cypres.

The Cure of Diarrhæa coming after other Diseases.

If a Diarrhæa follows an intermitting Feaver, and Choller be voided from thence, you must purge as in a chollerick Diarrhæa, and stop the Flux as a disentery alwaies regarding the Feaver. And this is to be observed in continual Feavers when nature dischargeth choller, in which you must not stop except it cause much weakness: If it comes otherwise by weakning, it signifies no good: yet we must stop and strengthen. And the same must be done in Pestilential Feavers, in which if the Flux take nought of the cause away, it is dangerous.

If it come in diseases of the Liver or Spleen, you must observe the same rule. A flux of the belly after a Consumption or Phthysick, Atrophy, Hectick or Dropsie is usually deadly: yet it must be resisted, alwaies having regard to the disease that accompnieth it.

The Cure of a Lientery.

Lientery is a Flux wherein the meat is not changed, but is voided, as eaten. If it come from the fault of things eaten, it is cured more easily. If from the Stomack, it shews much weakness, in regard the meat is no waies concocted, the Cure is harder, and in old men impossible. As also that which is joyned to great diseases.

The method of Cure is in respect of the Cause: If the distemper be cold and moist or simple weakness, or joyned with Water, it is to be cured as the weakness of the stomack: alwaies choosing in this case things that astringe and evacuate Flegm, and change the temper and strengthen the Stomack.

The Humor is to be voided by Vomits, if it cleave to the stomack: By which means the Flux of the Belly is diverted, with Oxymel simple or of Squils.

Also we purge the same humors with things proper for the stomach, and that strengthen it: as gentle Pills, of Hiera, alephanginæ, Assajereth and stomach pills; or stronger, as of Mastick, or Agrick, such also as are mentioned in weakness of the stomack, good to purge and strengthen the stomack; beginning thus: Take *Aloes prepared with juyce of Wormwood half an ounce &c.* Or thus Take *Aloes the best prepared half an ounce, Rhubarb &c.* Or use the Physical Wine mentioned for the Cure of a loose weak flegmatick stomach: that begins thus: Take *Rhubarb two drams, yellow Myrobalans &c.* and others there that purge and strengthen the stomach.

Clysters are not here necessary, because the stomach is here worst which must be more regarded then the stools: except there be an immoderate dejection, as in other Diarrhæas: And then things that stop other Fluxes may be used: Choosing those that respect the stomach, oe mixing such with the Decoction, as Cypress roots and Nuts, Wormwood, Sage, Roses, French Lavender, Rosemary and the like.

We strengthen the stomack with divers things mentioned in the weakness thereof, chooling those that are most astringent for a loose and moist stomach: as Nutmegs and Cloves which must be torrefied a little: Or swallowing two or three grains of Mastich.

Old, Red, astringent Wine is good; by it self or after other strengtheners: in a final quantity. Or that physical wine that begins thus; Take *roots of Masterwort, Galangal. &c.*

Or this: Take *roots of Tormentil or Snake weed one ounce Citron peels six drams, Nutmegs and Cloves, of each three drams; Coriander seeds two drams, Mastick one dram and an half*: beat them for wine

Some commend the wine of the infusion of Tree Moss.

The stomack powders mentioned in weakness of the stomach are good, the usual are Aromaticum Rosatum of *Gabriel* and *Mesue*, Rosata Novella, Diagalanga.

And those after meat to be given, as that which begins: Take *Cinnamon half an ounce, sweet Cassia two drams, Galangal, &c.*

And those made into Lozenges which begin thus: Take *of the eighth Pouder, and of Aromaticum Rosatum one dram, &c.*

Or this: Take *parched Nutmegs two drams, Cloves parched and Coriander seeds prepared, each one dram; Coral two scruples*, give it with *Wine* or with *Sugar of Roses* or *pulp of Quinces*: Make an Electuary.

Or add to this pouder, *Pomegranat seeds and Sorrel seeds one dram, Dock seeds, Raysons stones, each half a dram*; and other stomachical astringents, as Acacia, Box-thorne, and torrefied Myrobalanes.

Other strengtheners and astringents for a loose moist cold stomack, are of Candies as of Acorus, Citron peels, Quinces, Nutmegs, Cloves.

Electuaries, are Diacydonites with the species, of wild Acorus, with the species: Or our Composition which consists of *Marmalad of Quinces one ounce and an half, candied Citron peels one ounce, &c.* and the two mixtures there mentioned.

Conserve of Rosemary flowers hath been often given with good success: with some drops of spirit of Vitriol.

After flegm is purged, apply outwardly to strengthen and bind the stomach, things mentioned in the weakness thereof, especially astringents which are good both to the stomach and belly. And some things mentioned in Diarrhæa, if the loosness be very great.

Oyles mentioned in weakness of the stomach, strengthen and bind.

And the two Oyntments there mentioned, which begin thus: Take *Oyl of Mastick and Spike, each one ounce; &c.* Thus, Take *Oyl of Myrtles &c.*

Also *Galens* Cerot for the stomach or that which begins thus: Take *roots of Birthwort, Galangal, each half an ounce, &c.* Or thus, Take *Mastick one ounce and an half, Frankincense, &c.*

Also Emplaisters, as that of Mastick, which begins thus: Take *Mastick two ounces, Frankincense one ounce, Storax &c.* Or that Diaphœnicon of *Mesue*, or of *Montagnanus* made of a crust of bread, all there mentioned.

Also the Cataplasm there of Juyces, which begins thus. Take *Mastick half an ounce, Frankincense, Labdanum, &c. with the Pulp of Quinces apply it.*

Or this: Take *Pulpe of Quinces, or Pears* (as in the cataplasm for the dysentery) *three ounces, Rie-bread Crumbs eight ounces*: boyl them *in strong Wine*, and towards the conclusion, add *Pouder of Citron peels two ounces, Pomegranate peels one ounce, Nutmeg half an ounce, Roots of Galangal, or Cypress two drams, Cloves one dram, Spike half a dram, Wormwood dryed, Mints, each two drams, Labdanum three drams, Mastick half an ounce*, beat them well together, and *with Oyl of Myrtles, Roses omphacine, each one ounce and an half; Oyl of Spike one ounce*: make a Cataplasm.

Also Fomentations, as that for a weak stomach, which begin thus: Take *Galangal, Masterwort roots, &c.* Or that for a flagging loose stomach, which begins thus. Take *Citron peels half an ounce, Pomegranate peels two drams, &c.*

Also that astringent bag, which begins thus. Take *Mastick half an ounce, Frankincense two drams, &c.*

Cupping-glasses to the stomach, (as we shewed in Vomiting) keep the meat longer in the stomach.

Some use a Dropax or stinking Plaister, and Sinapisms, or those of mustard.

The Cure of a Lientery from a sharp Humor, or Choler, or meat eaten.

If a Lientery come from other causes as from choler, or a sharp Humor which forceth the stomach to send out the Nourishment; then the first care must be to evacuate that, and allay its

sharp-

neſs; and to ſtop the Flux and Vomiting, as in a Dyſentery, and the Diſeaſe of Choler.

If a Lientery come from meats eaten, let thoſe be afterwards forborn, and a good diet be kept, as in the weakneſs of the ſtomach. Let not the Food be moiſt, but thick and clammy, that will ſtay, and alſo will eaſily concoct: as lean and moiſt fleſh, green Cheeſe, Rice, Papps, not made of milk. Applying the mean while outward aſtringents, and a Cupping-glaſs.

The Cure of a Lientery from an ulcer or ſcar.

If a Lientery proceed from an Ulcer of the Stomach, that muſt firſt be regarded: as we ſhewed in the Pain of the Heart, from the Ulcer of the Stomach, and the Flux as in a Diarrhæa.

If it come from a ſcar, it is ſcarce curable, becauſe it cannot be taken away, except it depart of it ſelf.

The Cure of the Liver-flux.

A Liver-flux, if it follow a Dyſentery, and the ſtrength be ſpent, and the Liver naught, is deadly. There is another which weakneth, by reaſon of the great Evacuation of water; as we ſhewed in Diabetes and dropſie. And the Liver hath then a preternatural Heat, and is weak: For the Cure of which, the temper muſt be altered, and the Liver ſtrengthned, and the Flux ſtopped, as in a Dyſentery. Therefore it is good to take heed of too great openers that are hot, and of opening the Veins, except with temperate things that carry the whey to the Ureters: Thus,

Opening of a Vein is not needful, for the bleeding is ſo little in this Diſeaſe, that it requires not ſo large an Evacuation, which will weaken.

Rhubarb is called the Soul of the Liver, and is good here as in a Dyſentery, where there is any thing to be purged. The pouder is given to *two drams, with half a ſcruple of Spike, or half a dram of Cinnamon, with Myrobalans,* or others mentioned in a Dyſentery. Or make pills of Rhubarb and Maſtick, as in the Diarrhæa: Take heed here of Aloes, for it opens the mouths of the Veins.

Clyſters are not good but of milk, if there be pain or other accident, uſe a cleanſer, or a healer, or an aſtringent Clyſter, as in a Dyſentery.

Or uſe theſe Pottons to ſtop the Flux, and to correct the diſtemper of the Liver.

Take *Syrup of Quinces, and of dryed Roſes, of Myrtles, each one ounce; of Succory alone, or with Rhubarb, and of Endive, each half an ounce*: mix them.

Or make a Julep thereof, with water of plantane, of Oak leaves, Endive, Liverwort.

Alſo Syrup of Liverwort, boyled with Sugar, is good.

A proper Decoction. Take *Aſparagus roots, Sorrel, Plantane, Fennel, each one ounce; Liverwort one handful, Endive, Agrimony, each one handful and an half; Raiſons, with the Stones, three ounces*: boyl them *in Broath or Water.* It is better *with half a dram of the Pouder of a Wolfes Liver,* given at every draught.

We allow Milk ſomtimes, becauſe it ſtops the mouths of the Veſſels, eſpecially to them that have uſed it, and love it. It muſt have Steel quenched therein, and Sheeps milk is beſt, if the Whey be taken out by the quenching.

Alſo Almond milk, and Rice milk, and Barley cream, are good.

Raiſons, and Currance are good for the Liver, eſpecially if unſtoned or bruiſed.

You may make a thick Juyce of Raiſons by boyling them in red wine, and ſtraining them, and then boyling them again to a Rob or Quiddeny. This may be given alone, or with pouders.

Pouders are given alone, with Wine, Broath, Milk, or with Rob of Raiſons, Quinces, or with Syrups, like Electuaries, or with Sugar of Roſes, or Conſerves, as of Succory, &c.

The firſt pouder. Take *Coriander, and Dock ſeeds, each one dram; Endive, Purſlane ſeeds, each half a dram; of red Roſes one ſcruple, Sanders half a dram, red Coral two ſcruples.*

The ſecond: Take *Sorrel ſeeds one dram, Seeds of Hartches Herb, or Dodder, or Water-creſſes, each half a dram; burnt Ivory two ſcruples, the inward Skins of Hens Gizards one ſcruple.*

You may add to theſe one dram of the Pouder of Wolfes Liver, or to ſtrengthen, Diamargariton frigidum.

The third Pouder: Take *Rhubarb, Wolfes Liver prepared, each one dram; Barke of Frankincenſe-tree half a dram, Cinnamon one ſcruple, Spike half a ſcruple.*

The uſual Pouder for the Liver and the Flux thereof, is Diatrionſantalon, by reaſon of the Sanders, and the Rhubarb, which is ſomtimes doubled in quantity. And by reaſon of the Gumms, it ſtops the Veins, and of coolers, it allayes the Heat. It may be given in Lozenges or Pouder. Diarrhodon Abbatis doth the ſame, being of the ſame Ingredients, and more. When the Heat is not great and the Stomach weak, you may uſe Aromaticum Roſatum.

Narcoticks are rather given againſt watching then pain, becauſe the Flux is moſt at night. Among which Philonium Perſicum is good to aſtringe.

Outwardly uſe things mentioned for the Dyſentery to the Belly, becauſe the Veins muſt be ſtopped, and the Flux ſtopped, alwayes adding things proper for the Liver, which lyeth under the right ſide of the Ribbs, and the Oyntment uſeth to reach to it. You may uſe the Oyntments, Pouders, Cataplaſms, and Plaiſters there mentioned, adding for the Liver Wormwood, Agrimony, Sanders, Spike, Schænanth, Aſarum roots, burnt Ivory, Storax, &c.

You muſt apply to the Liver if it be hot, things that temper and ſtrengthen, as in the beginning of an Inflammation, as that of Oyl of Roſes, Myrtles, with Juyce of Endive, or Succory. Alſo the Unguent of Roſes, and Cerot of Sanders, with Wolfes Greaſe, which is highly commended outwardly and inwardly. And the Epithem there mentioned, which repelleth, which is of Roſe-water &c with burnt Ivory.

You may apply ſome Coolers mentioned for the Liver to the Reins, which ſuffer and conſent therewith.

Alſo to bath the Feet, and uſe externals mentioned in the Dyſentery, it is good.

The Cure of the Caliack paſſion.

Cœliack paſſion, or the Flux of the Belly, when the Chyle is voided pure, is an uſual Diſeaſe in Children, and not dangerous, except joyned with other Diſeaſes, or a Diarrhæa. In this caſe when it comes from the Obſtruction of the Meſeraicks, with weakneſs of the Liver, and the Veins adjoyning, which cannot ſuck: You muſt firſt open Obſtructions, with things proper for the Liver, that diſturb not the Belly; abſtaining from aſtringents, becauſe the Flux is not immoderate: Nor muſt they be uſed except after Obſtruction is opened, there follow another Diarrhæa or Flux. The remedies are theſe following, beſides thoſe mentioned in Obſtruction of the Liver.

Theſe gentle Pills are good to take away Flegm, Slime, and Filth, which ſtops the Veins. Take *Rhubarb one dram and an half, Agarick one dram, Cinnamon half a dram, Spike, Schænanth, each one ſcruple*: make a Pouder. Or *with Water, Juyce, or Syrup of Endive, or white Wine, Pills, let two ſcruples be the doſe.*

Or, Take *that pouder, and ſprinkle it with white Wine for a night, and with Fennel, Smallage, and Succory-water* ſtrain it, and add *Syrup of Roſes laxative of Endive, Maiden-hair, each half an ounce*: make a Potion for once.

Then give theſe following, the Lozenges of Diarrhodon, Diatrionſantalon: Or if you will open more, of Diacurcuma, all which have Rhubarb.

Or give this Electuary. Take *Conſerve of the Flowers and Candyed, Roots of Succory, each one ounce; of Maiden-hair ſix drams, Conſerve of Smallage, or Fennel, one ounce and an half, Conſerve of Eryngus roots half an ounce, Pouder of Diarrhodon, or Trionſantalon one dram, Diacurcuma half a dram, with Syrup Bizantine,* make an Electuary.

Corcus Martis made with Juyce of Citrons, or distilled Vinegar, is good to be put into Electuaries.

Let distilled Waters be drunk presently after the taking of Lozenges or Electuaries, of Fennel, Smallage, Succory, Endive, with the third part of white Wine.

The Syrup Bizantine, of the five Roots, or of two roots, of Succory, Endive, or Maiden-hair, may be given alone, or with distilled Waters.

Or this Decoction. Take *Roots of Succory, Fennel, Smallage, each one ounce; Eryngus, wild Parsnips, each half an ounce;* steep them *in white Wine, of Maiden-hair, Sowthistle, Endive, each one handful; red Peaſe one pugil, Coriander, and Smallage seeds, each one dram;* boyl them, and add to the straining *Sugar, and one dram of Cinnamon, Sanders, and Schænanth, each one scruple.* Let it be for three draughts.

A Wine of the Infusion of those Roots is better, adding *Monks Rhubarb, Madder, each one ounce; Cypresse-roots half an ounce, Wormwood, and Agrimony, each two drams.*

The Belly must be anointed, not with astringents, but things that open Obstructions, which will pierce to the Mesentery, and the Veins of the Omentum. Therefore,

Make this Oyntment. Take *Oyl of bitter Almonds one ounce and an half, Spike, Chamomil, or of Melilot, each one ounce; Juyce of Smallage, or Fennel, and white Wine, each one ounce and an half;* Let them be boyled or mixed for a Liniment, used with the hand first dipped in Aqua vitæ.

Or, Take *the aforesaid Liniment, and with Asarum roots, and Gentian, each one dram; Spike, and Schænanth, each half a dram, Smallage seed one scruple, and Wax* make an Oyntment.

Apply things mentioned in the Weakness of the Liver, to the region thereof.

A Cupping-glass applied there, is thought to draw the Chyle thither.

If a Diarrhœa follow, then you may use gentle astringents inward and outward, as in a Lientery, but not otherwise.

The Cure of mattery Stools. If it come from the Dysentery, or colick, the Cure is there mentioned: or from the Liver or Spleen.

If this Voiding of Matter be of long continuance, and come from an Imposthume of the Mesentery turned to an Ulcer, the Patient is of ill Habit of Body, and discoloured. And the Cure is difficult, because the Ulcer is without the Guts: and the Matter may easily fall into the cavity of the Belly. But the same things must be used as in a Dysentery and Tenesmus, with Matter.

The Cure of fat and oyly stools. It is cured as a Lientery, if it come from eating of fat Meats that are not concocted: Or as a Diarrhœa, when fat is mixed with other Excrements.

The Cure of the Voiding of Excrements at the mouth. The Excrements are voided otherwise then by the Fundament. And if by vomiting, it is dangerous, and few escape: As was shewed in the Iliack Passion and the Rupture. And then you must look to the cause of the Disease, as was shewed; and wash the Mouth with wine-vinegar, and sweet things, by reason of the abhominable stink, and strengthen the Stomach, but you must not stop, least the filth be retained.

The Cure of the excrements voided by Urin. If Dung come forth with Urin, you must regard wholly the Ulcer fistulated, which passeth through the strait Gut to the Neck of the Bladder: As was shewed in Passing of Matter.

The Cure of Excrements of the belly voided at the womb. You must cure the hollow Ulcer in the neck of the womb, which pierceth the strait Gut: As we shewed in the Ulcer of the womb.

The Cure of Excrements voided by wounds and and Fistula's. If Dung or Chyle passeth through a wound of the Belly that hath pierced the Guts, the wound must be cured. And if it be deadly, as usually it is when great, or if the Excrements fall with Blood into the hollow of the Belly, then it ends with death. But if the wound be turned into a fistulated Ulcer, then the Excretion is permanent and incurable. But if this wound not only in the skin and flesh, but in the Guts, grow together by a Callus, as we have seen, or by the flesh that grows near to it: As we shewed in Wounds of the Bladder. This filthy Excretion may be cured, and the Patient may live.

And in these desparate wounds, if they be large, so that you may see the Guts that are wounded, or if you enlarge them, you may put in a silver Pipe or rather of Lead, and bind the Gut strongly thereupon, which hath saved many from their Graves.

CHAP. XII.

Of filthy Excretions.

The Kinds,

WHen other Excrements besides those mentioned, come from the Body, they are preternatural; as from the parts following.

Filth from the Ears. There is alwayes Filth in the Ears, and it comes not forth but by being taken out, it is commonly like wax yellow and thick, somtimes hard, and discoloured other wayes. This causeth Itching when there is much, and hinders Hearing, as we shewed in the Hurt of Hearing.

Filth from the Nose. There is somtimes Filth in the Nostrils that is thick, moist, or dry, white, yellow, or black, sticking so, that it cannot be taken off without hurt, or filling the Nose, of an ugly aspect when it is forth: And especially when Children, or other nasty people swallow it.

Filth from the Eyes. Besides Matter and Tears, there is thick, white, or yellowish Filth in the Eyes, in bleareyed people, and others, as I shewed in the Diseases of the Eyes.

Filth in the corners of the Mouth. Filth sticketh in the Corners of the Mouth which are called in Latin *Bridles*, and ulcerateth it, it continues long.

Filth in the Womb. Sometimes in sluttish women there is Filth in the Privities besides other Fluxes, and also in the Glans of Mens yards, that is covered with the Fore-skin, which causeth a stink.

Filth from the Skin. Filth sticketh in many places to the Skin, thin, and thick, which makes a stink like that of a Goat, called in high Dutch *Brietelen*; as if by long continuance in a place, like a Hen hatching of Eggs, they had contracted it.

Filth between the Toes. They who have sweating Feet have filth and stink, this is usual, especially in Summer, which is offensive to their Companions: And between the Toes there is thick, black Filth, that stinketh. As also under the Arms and in other hairy places, where it easily sticketh.

Filth of the Teeth. The Teeth are often foule all over, or at the Roots: And the Filth is either soft like Pap, or yellow; somtimes hard and like Gravel: And somtimes they are black, as with Soote.

The Causes.

Choler is the cause of filth in the Ears The Colour and Bitterness shews that

that Choler is the cauſe of the Filth of the Ears. This Choler comes with water or whey into the cavity of the Ear, and the water ſweats out, and the Choler grows thick. And it appears that it comes not from the inward paſſage of the Ear, becauſe it hurts not the drum nor the hearing, but by ſtopping the Ear outwardly.

Water is the cauſe of filth in the Ears, Eyes, Noſtrils, and Privities.

The watery Humor which moiſtneth the Eyes and Ears, being made thick by continuance, cauſeth the filth in the corners of the Eyes and the yellow filth in the ears. And from Moiſture eſpecially, if they have the Whites, womens Privities ſmell ſtrong. And the filth between the Glans and Præpuce in men which ſtinketh, and cauſeth Itching, is from corruption of Seed, or a ſlimy Humor.

And the ſame Humor dryed in the Noſtrils by hot air, cauſeth the filth there, which ſticks ſo cloſe, eſpecially in the night, if the Head lie back, ſo that the moiſture cannot come to the Noſtrils.

Sweat cauſeth the filth in the Feet and Skin.

From uſual Vapors and Sweats which come from the Body, that ſmell ſtrong like a Goat, in ſlovenly people, the skin grows foul and ſtinketh. And Nature throws them to the extream parts, whereby men that ſweat, have ſtinking Feet, eſpecially in Summer. And when filth is long kept in ſtrait places, or hairy, as in the Arm-holes, Groyns, Privities, and between the Fingers and Toes, it ſends a noiſom Scent.

Meat is the cauſe of foul Teeth and Corners of the mouth.

Thoſe ſluffs that foul the Teeth, being thick and clammy, come from Meat that is ſlimy, and ſticks thereto by chewing, except they be rubbed and waſhed. And alſo thoſe in the Mouth that cauſe Ulcers, if they be not cleanſed, come from the ſame.

Spittle is the cauſe of foul Teeth

Spittle being ſlimy, fouls the Teeth, eſpecially when the meat eaten makes it more tough, or hot breath when the mouth ſhut, dryeth it. And when the teeth are idle, and chew not any hard thing, as bread which uſeth to cleanſe them, they are foul. Hence it is that they which chew with one ſide of the mouth only, have the other ſide filthy; and that Filth grows hard like gravel, diſcoloureth, and maketh the teeth uneven. And this may come from ſerous earthy matter in the Spittle growing to the Teeth: As we ſhewed other Stones may grow, eſpecially where the Teeth are rough, and about the Gumms, and where they are worn. This Filth will grow hard and over the teeth, if they be not cleanſed. Alſo in the French Pox the Spittle defiled with Quick-ſilver which blacks the teeth, and makes them looſe.

Vapors are the cauſe of foul Teeth.

From a hot Breath in hot Diſeaſes, or malignant Vapors in the Plague, the Teeth and Jawes may be likewiſe affected.

The Cure.

The cure of Filth in the Ears. And in the eyes.

We ſhewed in the Hurt of Hearing how the Ears are to be cleanſed.

The Eyes muſt be cleanſed as in Epiphora and Tears.

In the Noſe.

The Filth in the Noſtrils may be taken out with the Finger, if not, let Milk or other Liquor be ſnuffed up firſt.

In the corners of the mouth.

Filth muſt be wiped from the Mouth which the Spittle and Meat cauſeth: Or if there be an Ulcer it muſt be cured as the Ulcers of the Mouth.

In the Skin.

It is taken of with water, eſpecially if warm. And if it is much by bathing. And if it be too ſlimy, and tough, greaſie, and ſtinking, it muſt be waſhed of with cleanſers and oyly things. As with Lye of Aſhes, with Lime ſomtimes, if we will have it ſtronger, which hath alſo a fat Slime beſides its cleanſing vertue: Soap is of the ſame force, being made of aſhes, Lime and Suet boyled hard, adding a ſweet ſcent, as Orris roots. Oyl is uſed for Suet, and then the Soap is ſofter and blacker. Rub theſe Soaps in the hand till it maketh ſudds, and it will take off any Filth: waſh the Hands in your own Piſs, and it will cleanſe almoſt as well as Lye. Other things to make clean white and ſoft hands are mentioned in Coſmeticks or Paints and Waſhes.

The Cure of the Filth of the Feet.

The ſtink of the Feet from Filth and Sweat is hardly cured, becauſe ſweat returneth; it often continueth long, and is nauſeous to company, and therefore requireth Cure. And it muſt be done as followeth; as alſo the ſtink of the Arm-holes. Firſt purge away the matter which occaſioneth the ſweat, as the humor is.

Then provoke Sweating that the abundance of Humors may be thrown to the Superficies, often, till it ceaſeth.

Then waſh the Feet or Arm-holes, with Cleanſers and Dryers, mixing alwayes ſweet Scents.

A Lye of Aſhes is good for this, eſpecially of drying Wood, and burnt Bones, with Bole, Tartar, Salt, Allum, Vitriol, if you will dry more.

All, or ſome of theſe may be boyled in Smiths-water, or water of other Minerals.

A Decoction of Vitriol alone in water, is good.

In all theſe for ſcent ſake, boyl ſweet Herbs, as Sage, Lavender, Spike, Myrtle leaves, Wormwood, and mix Wine therewith, and other aſtringent Herbs, to dry ſtrongly.

Dioſcorides commends Applications of Myrrh, and Allum, Carduus roots, and Daffodil roots.

If it be very ſtrong, and hard to be removed, uſe drying Baths, &c.

We ſhewed in the Cure of Whites, how the Privities ſhould be cleanſed from filth which is ſo ſtinking and offenſive to the Husband.

The Cure of foul Teeth.

All kinds of Filth of the Teeth, white, or yellow, or black, or gravely, hard are taken away with the following Remedies.

Firſt by pricking them after meat, and by waſhing the mouth.

Tooth-pickers muſt not be made of Iron, leaſt the teeth be hurt, nor muſt you pick them with the point of a knife which is an evil cuſtom, but of wood, or a ſtrong bone that will bend, as of ſome Fiſh, or the tendons of Cocks Leggs, or claws of great Birds.

Some are made of Wood that fix the Teeth, and give a ſcent, as of Maſtick tree, Myrtle, Bay, Juniper, Fennel ſtalks, laid in Musk.

A good Tooth-picker is made of a Marſh-mallow root, when we fear that hard will wear the Gumms, you muſt firſt dry the Root in a Oven, and then cut into Tooth-pickers.

The Mouth is to be waſhed alſo with water. And the Teeth muſt be wiped, or rubbed with the finger, or a cloth, or with a piece of Scarlet. Or the outward bark of a Nut-tree, or with inward green, or the like cleanſers.

This is better done with Dentifrices or things to rub Teeth, made of Pouders, to be taken wet with the finger or cloath. Or to be made into things like Suppoſitories, with Gum Traganth infuſed in Roſe-water: Or with honey like a Pap. Theſe muſt not be uſed conſtantly, leaſt the teeth be worn away thereby.

Theſe Pouders do actually cleanſe as Sand and the like, doth cleanſe Veſſels, or potentially, by a drying and cleanſing quality. And they muſt be beaten very fine, leaſt they make the teeth rough, or wear them.

As Pouder of Cuttle-bone which is eaſily beaten, Crabs Eyes, Pumex, and Spunge ſtone, and that of the Froath of the Sea called *Halcyonius*.

Some muſt be burnt as the Pumex, inſtead whereof cinders well burnt may be uſed.

This

This burning makes them cleanse more; Harts horn is of most use, Ivory, and divers Teeth, as of Horses, all kinds of shells, of the Sea, Land, as of Snails, and of Fruits, as of Dates, Myrobalans, Olives, Cypress-nuts; these are all best burnt. Also Pouder of Stones, as of Alabaster, the specular or clear Stone like Grass, and others that are easily beaten, or burnt, also Bricks or Tiles.

Some soft things are dryed in an Oven, as Crusts of Bread of Barley is the best.

Also of Plants, as Burnet, Pellitory, Beets, Maidenhair, Coleworts, Myrtles, Mastick-tree, Olive-tree, and of sweet scented Herbs, as Penny-royal, Organ, Hyssop, Mints, Sage, Rosemary, burnt as the other.

To these are added Pouder of Cinnamon, Cloves, wood aloes, to make them sweet; or Marjoram, Lavender, Orris roots, and Musk.

And to fasten the Gumms if loose, Mastick, Frankincense; and Myrrh, if foul. And if the Teeth be rotten, use things formerly mentioned for them.

And to take away Flegm, add Pellitory of Spain, mustard seed, Pepper, Ginger; or a little Hellebore, if flegm be abundant.

Salt doth not corrode, and yet cleanseth the Teeth, therefore is good to be rubbed upon the teeth, being it is alwayes at hand. And it may be mixed with other Pouders to make them stronger and more pleasant. The boyled common Salt is good as well as that which is digged out of the Earth called *Sal Gem*. Also Allum and Niter burnt.

The fat that swims upon the Salt Leati or Glass-wort, dissolved with broken stones to make Glasses, which being cold turnes into a stone and is called the grease of Glass, being poudered, doth wonderfully cleanse the Teeth.

And white Wine Lees or Tartar doth the same with other Pouder.

You may make divers compositions of the former, and these are easiest made. Take *Cuttle-bone half a dram, Coral finely poudered one dram, burnt Harts horn half a dram, Salt two drams*, or more, make a Pouder.

Or, Take *Pumex stone half a dram, burnt Ivory half a dram, Pouder of Alabaster one dram, of the Grease of Glass two drams.*

Or, Take *burnt Crusts of Bread two drams, Crabs eyes one dram, Date stones burnt half a dram, Ashes of Rosemary one scruple, burnt Allum half a dram.*

You may make these sweet with Angelica, or Orris roots, or Cinnamon, or Cloves, or the Oyls thereof, or make them into Dentifrices with the musked infusion of Rose water, with a little Mastick to strengthen the Teeth, and other simples mentioned.

This Dentifrice is of excellent vertue: Take *Barley meal and common Salt, each equal parts; and with Honey*, make a Past, put it in Paper and dry it in an Oven till it be almost burnt, pouder it, and add to *three drams thereof, ashes of Crabs, Pumex calcined, Egg shels, Cypress, Allum burnt* if you please, *two drams, dryed Citron peels, Camphire, each one dram*: make a fine Pouder.

The Teeth are clensed by the juyces of some Plants, as of Burnet, and roots of Sowbread. Also with a clout dipp'd in some distilled waters. As this: Take *common Salt, or Sal Gem three ounces, Sal Ammoniack one ounce and an half, Allum one ounce*: let them be beaten, and dissolved *with a little Rose, or Lemon water*, and distil them.

Aqua fortis, if it be mixed with other waters, til it be made harmeless, is admirable to clense the Teeth, especially in the French Pox.

Also Oyl of Vitriol used as the former.

By washing of the mouth, the meat that sticks in the Teeth is not only washed out, but also the filth and foyl which by breathing at night sticks to them is taken off, or prevented. If every morning you wash with water, Wine and a little Vinegar and rub the Teeth, and after use Dentifrices if need require, and then wash them again with the same. If this should be done dayly, as the Teeth need no less washing then the Hands, they might be kept clean and sound til old age, except some other accident, and without these they cannot be kept clean, white, and uncorrupted.

Eating keeps the Teeth clean, therefore on that side where the Teeth are rotten and they cannot shew, is sooner infected and there are scales. Therefore let them use to eat one both sides.

When meat fastned in the Teeth is picked out, somthing is taken from the sides, becaufe it cannot be so easily come at, when it is lodged within, as when any filth is without. Therefore it is good to dip the Tooth pickers made of wood (as was shewed) in Salt, or Allum water.

You must take off the hard flakes with Iron Files or flegms for that purpose, made broad or sharp.

CHAP. XIII.

Of the Voiding of Living Creatures.

The Kinds,

THere are some Living Creatures bred in the Body which are wholly besides nature, as also the voiding of them. And they are either Worms, or Insects, or Lice. As for Fleas it is a doubt whether they be bred in mans body or not: but no doubt they come from others.

Worms voided by Stool.

There are divers kinds of Worms that come from divers parts of the Body, which are like other Worms.

Long Worms.

The long worms are called *Lumbrici*, becaufe they are like Earth worms. They are round, sharp at the both ends like Earth worms, shewing neither head nor tail, whitish and hard usual in Children. They are voided more or fewer usually dead, and somtimes alive.

Divers accidents accompany them, the gentlest are pain of the belly, gnawing at the Heart, sighing, a dry Cough, Itching of the Nose, therefore they rub it constantly: grating of the Teeth, restlessnes, heavy dreams, which makes them suddenly awake and cry out. The great accidents are greedines, vomiting, loosnes, Lientery, Feaver, Convulsion and Swouning.

Arsworms.

The short worms that come from the Fundament are called *Ascarides*, they are round, like Mites in Cheese, or Worms in Ulcers. These are voided alive with the Excrements, with great itching and bring scarse any other accidents.

They reckon flat worms with these, but becaufe they neither live nor move as the other but are long membranes, that grow in the body, we shall mention them in other excretions.

Worms comming out at the mouth.

Such Worms come also out at the mouths of Children, in their sleep, and from others at other times causing Vomiting.

I cannot omit the mentioning of a monsterous worm very great behind the Head like a Canker worm, hairy, with a black shell like a beatle upon the back, with many Legs like an Ear-wig voided by a souldier vomiting, after long heart pains.

Worms of the Teeth.

Some thought that worms breed in the Teeth within, being deceived by the smal Fibres

Fibres found in broken teeth, as in cavities of great bones. Some thought them to be Nerves: Others Wormes. But they may be in hollow teeth.

Worms in the Teeth. The Lumbrici or long worms will come out at the Noſe, or Mouth, and cauſe itching.

Somtimes little worms have been blown out at the Noſe, from an Ulceration there.

A Bergen Phyſitian affirmed ſeriouſly to me that he ſaw a hairy worm with many Feet, like an Ear-wig ſneeſed out at the Noſe by a woman, which a long time before felt a great Itching about her Fore-head.

Worms in the Ears. It was ſhewed in Ulcers of the Ears, that worms come forth with matter.

Worms coughed up. Some affirm that men in Conſumptions have coughed up worms.

Worms piſſed forth. I ſaw a Man who had the Colick (of whom I ſpake in the Colick) that made Urin with infinite ſmall worms like mites in cheeſe, ſwimming alive therein; which dying, ſanke down in a great lump to the bottom. And I ſaw the ſame after in others. And have ſince read of divers that have ſeen the ſame.

Worms in Ulcers. Navel-wormes. We ſhewed in verminous or worm Ulcers, how they bred there.

We have ſeen in the bottom of the navel a long round worm, ſuch as breeds in meal, that thruſt it ſelf forth, and drew in again.

Worms in a wound of the Belly. Some affirm that the long worms of the Guts have come forth at an Ulcer which hath pierced through the Belly and Guts.

Dracunculi or little dragons. It is reported that in ſome Diſeaſes there are worms in the Arms, Leggs, Thighs, and ſides called *Dracunculi*, in high Dutch *Minfroß*. But we leave the deſcription of them to them that have ſeen them.

Worms remaining incloſed in the Body. Beſides theſe kinds of worms, others are bred in the Body, where there is no paſſage for them to get out. But after death are found in diſſection or Anatomy; of which neither the Patient that complained of other Diſeaſes, nor the Phyſitian knew. Theſe belong not to things voided or Excreta, but to other accidents, where they ſhall be ſpoken of.

Worms under the heart. Under the Heart, it is reported that worms breed which prick and moleſt, but they expreſs not the part: being deceived with thoſe worms that riſe to the mouth of the ſtomach, and there moleſt the Heart. For they cannot breed any where about the Heart or Pericardium or under it, becauſe it grows to the Midriff.

Phtheiriaſis or the louſie Diſeaſe. Lice come from divers parts of the Superficies of the Body, and cauſe an Itching moleſtation, which is called *Phtheiriaſis*. The kinds whereof are diſtinguiſhed by the parts of the Body.

Lice in hairy Parts. Lice breed moſt in hairy places, eſpecially the Head, uſually in Children and poor people; and ſomtimes in other unclean perſons. When they are grown they are broad with many feet equal, becauſe they leap not, but creep. And they have a black ſpot in their backs ſometimes. The young ones are called Nits.

Somtimes they grow in the Beard and Eye-brows, and cauſe Itching there: But are little, and are quickly routed from thoſe ſmall quarters.

Worms that eat the Hair. Alſo in the Hair under the Arms, ſome teach that the Hair of the Head and Beard may be eaten and cleft with worms or lice, ſcarce viſible.

Lice that grow to the skin, or crab-lice. There are Lice found faſtned to the skin about the hairy parts of the Privities, that cauſe grievous itching and pricking, and ſtick very faſt. Which the French call *Morpions*: Or kil-Doves, becauſe they are like the Lice in Dove-cots that kill Pigeons. We call them Crab-lice, becauſe they reſemble the Crab-fiſh. Theſe ſomtimes creep into other parts, and there ſtick in the skin.

Hand-lice. There is a peculiar ſort of Lice that breeds in the Palms of the Hands, and in no other part, except the Soles of the Feet, under the skin which cauſeth a little ſwelling or cleft, and a continual Itching. And when they are taken out, they cannot be ſeen to move but upon a clear glaſs. Theſe are called *Chironet* from the Hand in Greek, and *Acari*.

The Cauſes.

All kinds of Worms or Lice breeds of Juyce or Filth.

Worms breed of Juyce that putrefieth by heat, which is either Chyle, or any putrid Matter.

Chyle is the cauſe of long Worms. The Lumbrici of the Guts breed of chyl in the hungry Gut called *Jejunum*, where any of it, which is not ſucked away by the Meſeraicks, becauſe it is too thick, or too fat, but is wrought by the heat of the guts, through long continuance into one or more living worms. This Chyle is produced from the eating of certain meats which afford matter for worms. For which cauſe chiefly Infants that feed too ſoon upon fleſh, and have not milk that is convenient, are ſo troubled with worms. Theſe worms as they breed of this Juyce, ſo are they nouriſhed thereby. And when they conſume it, they cauſe a great appetite. And if they creep into the guts, they torment them with tickling, ſucking, and pulling, and cauſe griping and Fluxes. And if they get up to the ſtomach, whether they may eaſily go from the final guts, then by moleſtation and hindering of concoction, they cauſe accidents and diſeaſes of the Stomach and Lientery: And if they gnaw the mouth of the Stomach, they produce Symptomes of the Heart and Brain. And if they riſe upwards to the Jawes and Noſtrils, they trouble them. But they cauſe the greateſt accidents when they are killed and putrefied in the ſmall Guts, and ſend up ſtinking vapors to the Heart and Brain, which cauſe Convulſions and Feavers. It is thought that worms a long time retained, can ſo gnaw the Guts, that they may paſs through the Belly about the navel or Groyns. But this is not probable, for they have neither ſharp bills nor open, nor teeth, and by ſucking, they cannot do it. Therefore if worms come forth there theſe come from ſome Impoſthume in the outward parts, and are not Lumbrici or long worms, but ſuch as breed in Ulcers. And if they come from the Guts, there was firſt a wound which made the paſſage. But if worms come downward from the ſmall Guts with the Excrements, into the Gut Colon, then if they paſs preſently through they come forth alive at the Fundament. Or if they be mixed with the Excrements and kept long, they are caſt forth dead with the Excrements.

Slime or flegm is the cauſe of Arſ-worms and Noſe-worms. Aſcarides or little Worms in the Fundament and elſewhere, come from a putrid matter which getting a new heat from putrefaction, produceth divers worms according to the diverſity of the matter, which is ſimple or compound.

Aſcarides come from Flegm or Slime long kept in the folds of the thick Guts, and they will lie long there, till they are ſent forth by the Excrements. Alſo from flegm long lodged and putrefied in the cavities of the Noſe, may come worms. And that hairy or downy Canker-worm which we reported to be ſneeſed out from a womans noſe was ſo bred.

Matter is the cauſe of worms in the Noſe, Ears, and Lungs, and Teeth. From Matter not only ripe, but putrefied in Ulcers of the Noſe, and external Ulcers of the Ears. And from that in the Navel, come

worms. And from that in the Lungs ulcerated, come worms which are spit forth. And if they be found in the teeth, they come from the putrefaction in the cavities thereof.

Meat eaten that putrefieth is the cause of Arse-worms, and teeth-worms, and such as are pissed forth

Ascarides or Arse-worms come more usually from Meat that easily putrefieth, as Flesh, Cheese, Fruits, when it sticks in the windings of the thick Guts, then from Flegm. Because we may perceive that such things being out of the Body, produce the same. The same things sticking long in a hollow tooth, may produce worms.

We shewed formerly, that some worms bred of cheese were pissed forth, and it is probable, for they are very like mites. And the Patient as we shewed in the Colick, lived long upon Cheese, and voided a quantity of it by the use of a Clyster. Of which Cheese long retained and putrefied in the Guts, it is probable that these worms bred. And were sent by the Meseraicks with the Serum or whey into the hollow Vein, and so into the Kidneys and Bladder. And this is easie, because they are very little bodies. And in regard thicker Humors, and bodies do pass the same way. And this is the reason why others have pissed worms from eating Cheese, which had them or bred them after it was eaten. For in another corruption of Humors, either in or out of the Veins; it is seldom seen that worms are voided by urin. And every corruption doth not produce worms of this form like mites, but ascarides, or the like. Nor can they be from the ulcers of the Reins and Bladder, because they come from Ulcers in another form.

Filth of the skin, is the cause of Lice.

Lice breed from filth sticking to the skin, which filth proceeds from Vapors, Sweating, and the Excrements of the Skin, both under and above it, in Children, and poor people, and such as are nasty in certain parts of them where they putrefie. Especially in hairy parts, because filth will stick faster there, and can be less taken off then from the smooth skin. Especially in the Head, where they are most abundant, smal at the first, and sticking to the skin, but being nourished by the nourishment that comes to the skin, they grow great, and march about the Head, and sometimes into the Garments and other parts of the Body.

But if this Filth have any other Infection besides the excrementitial moisture, as about the Privities, where there is a venemous Vapor in unclean persons, it causeth a worse Progeny; and then the Lice are worse stick deeper in the skin, called *Crab-lice*. These come from Copulation when the hairy parts are united.

The Venom of humors, is the cause of Lice in the Hand.

From that which causeth Scabs, being retained under the thick skin of the palm of the Hand, and corrupted, proceed those little Lice under the scarse skin called *Chirones*, as appears by the Pustles and Scabs that are at the same time there.

And the thickness of the skin in the Palm of the Hand, is the cause why they are rather there, then in another part, which keeps these thin Excrements from being discussed. And the same may be in the Soles of the Feet.

The Cure.

The Cure of long Worms.

Lumbrici or long Worms bred in the thin Guts, staying long, and nourished with Chyle: are not known when they do no hurt. And without other Remedies pass through the Guts with the Excrements, or get upwards, but seldom, through the Mouth and Nose. But when they do hurt, either alive or dead, by staying in the Guts, and producing accidents, in tender Bodies especially, and endanger life, they ought to be cured.

The intention of Cure is to keep them from breeding, and to expel them that are bred out of the Body. We prevent their breeding, when we keep the Chyle from turning into worms; by making it moderate and thin like Milk, not much, and thick with Meat of good Juyce, not suffering Children to feed upon flesh and fat: but keeping them long to Milk and Pap.

When worms are bred, we expel them alive or dead, with things that provoke Nature thereunto. When alive, with things that cause them to flie, or kill them by a contrary quality, either manifest, as bitter and sharp, or salt, or sour, which worms hate. Or by fatness, which stops their breath. Or by a hidden quality, which we know by Experience. Also we allure them to destruction, with pleasant things. All these are to be directed according to the constitution and the accidents. As when there is a Fever you must avoid hot things that are bitter and sharp, or temper them with things which by sourness, allay the heat, and yet resist the worms. If the Belly be loose, you must use things that bind somwhat, and also kill worms. If there be swoundings, give Cordials. If Convulsions, things proper against them. For the doing of all these, let this course be taken.

Purge to stir up Nature to expel the Excrements and worms, with things that are proper to kill them if alive.

Rhubarb is the best ordinary Purge, especially in a flux, for it bindeth afterward: and also in a Feaver. Also Myrobalans, Juyce of Roses, and Peaches, Laurel tops, are enemies to worms. Especially Aloes, by reason of its bitterness, and being good for the Stomach, it purgeth it from crudities, and makes the Chyle pure.

Most strong Purges are bitter and sharp, and therefore good. As Senna, Agarick, Turbith, Scammony, Coloquintida, of which you must give more or less, according to the strength.

A pouder is thus made. Take *Rhubarb two drams, pouder against Worms half a dram, Coralline one scruple*: give it *with convenient Liquor, or Syrup*, half to those in years at a time, and less to Children *one dram, of Senna, or Turbith* will make it stronger, *and half a scruple of Scammony*, if you will have it yet stronger.

Pills are thus made: Take *Aloes two drams, Myrrh one dram, Worm seed one scruple, with Syrup or Juyce of Wormwood, or Gentian.* Make *a Mass for Pills*, give *a dram, or half a dram* to the younger sort. You may make them quicker with the former Purgers, or *six grains of Niter.*

A proper Infusion: Take *Rhubarb four scruples, infuse them in Wormwood wine.* Or if there be a Feaver *in Purslane, or Knot-grass water*, strain it, and give it with Sugar.

A good Decoction. Take *Knotgrass roots one one ounce and an half, white Dittany one ounce, Southernwood, Hyssop, Peach leaves, each one handful; Lupines two drams, Worm seed one dram, Cummin seed one scruple, Sebestens ten pairs.* These are said to kill worms, *Senna one ounce, Polypody six drams*: boyl them, adding *two drams of Rhubarb towards the Conclusion, and one dram of Cinnamon.* Give it at twice, and to young people at three or four times.

A very good Wine, which is not so bitter and unpleasant. Take *white Dittany roots one ounce and an half, Tormentil roots one ounce, Fern, and Gentian roots, each half an ounce; Wormwood, Southernwood, each two drams; Mints, Hyssop, each one dram and an half; Tops of the lesser Centaury one dram, Worm seed half an ounce, Senna one ounce and an half, Agarick or Mechoacan three drams, Turbith, Rhubarb, each two drams*; beat them, and infuse them *in four pints of Wine.* Let it be given more or less, according to the Operation.

The Syrup of Peach flowers is the best usual Purger, to kill worms. Or Syrup of Roses solutive, which kills them by its bitterness, and they are better with Rhubarb infused in them, or a little Scammony.

Pills and purging Lozenges, if there be a Convulsion with the worms, mentioned in the Cure of the Falling-sickness, may be given here.

There

There is a good pouder againſt worms that purgeth, made of Senna, worm ſeed, Coriander, and Harts horn.

Alſo the uſual Pills of Aloes, and Ruffi, and Hiera, and other Pills that have Aloes.

Alſo purging Electuaries which are good againſt worms, adding other things that kill them therewith, you muſt obſerve the ſtrength and Conſtitution, and other accidents, when you give them, eſpecially if there be a Flux or Feaver, and give aſtringents for the one, and coolers for the other.

There are many things that kill worms by a manifeſt or occult quality, or make them depart. To which we put pleaſant things, that they may ſuck them faſting, with things alſo that reſpect the accidents.

Some Food alſo, and Sauce is good againſt worms, as white Bread, green Nuts, Garlick, and Sebeſtens. And in Sallets, Beets, Endive, Succory, all green. Alſo Purſlane, Water-creſſes, Vinegar, Salt. Therefore when children begin to eat ſalt Meats, they are leſs troubled with worms, then when they did eat Milk, and freſh Meat. Alſo Salt keeps them from riſing up at the mouth.

There are alſo Pouders to be taken with Sugar, or wine, water, or Milk, with Honey, ſour or boyled wine, from half a dram to a dram, Or to be made into Lozenges, with Sugar diſſolved.

The ſimple Pouders are, the pouder of Worm ſeed, Coralin, Harts horn, beſt for Infants, becauſe not unpleaſant.

The Compound Pouders are firſt of theſe three. Take *Worm ſeed half an ounce, Coraline ſteeped in Vinegar, and dryone dram, Harts horn two drams.*

Another: Take *Worm ſeed, Lupines, each two drams; Colewort ſeeds, Coriander prepared, Purſlane, Citron, or Orange ſeeds, each one dram.*

A third: Take *white Diſtany two drams, Tormentil roots one dram, Gentian half a dram, Wormwood, Southernwood, each one dram; Thyme, or Mints, Flowers of Centaury, or Hyſop, each half a dram, Zedoary one ſcruple.*

A fourth Pouder: Take *burnt Harts horn two drams, Ivory ſhavings one dram, Earth worms half a dram, red Coral one dram and an half:* make a Pouder.

If you add Rhubarb to any of theſe, it will kill them, and expel them better.

You may make greater Compoſitions, with the Roots of Fern, Swallow-wort, white Thiſtle, Birthwort, Devils-bit, Alkanet, Madder, Barks of the Roots of Mulberries, and Cappars; Rue, Polymountane, Gooſgraſs, Savine, Horehound, Calamints, Sea-wormwood, Tanſey, Mints, Cat-mints; alſo Seeds of Orrach, Dill, Henbane, Gith, Pepperwort, Water-creſſes, Rochet, Turneps, Lovage, Hopps, Sorrel; alſo with Brimſtone, Saltpeeter, Peaſe, Earth-nuts, Myrrh, Gum of Juniper. And to make it precious, with Gold, Pearl, precious Stones, Unicorns horn, Bone of a Stags heart, Muſk, and Ambergreeſe.

Another is uſually made of worm ſeed, Lupines, wormwood, and Harts horn all poudered.

If there be a Convulſion or Swounding therewith. Take *Piony ſeeds one dram and an half, Purſlane, Citron, or Orange ſeeds, each one dram; Harts horn half a dram, red Coral, Diamargariton frigid, each one dram; Sugar of Roſes* as much as all the reſt.

A Decoction or Syrup. Take *Roots of Knotgraſs, Diſtany, each two ounces; (Tormentil or Biſtort* when there is a Flux of the Belly,) *Orris, Elicampane, Fern, each one ounce; Cardus, wormwood, Horehound, Time, Calamints, Mints, Rue, Hemp, each one handful; Lupines, Bay berries, each two drams; worm ſeed three drams, Purſlane, Colewort, Coriander, Citron or Orange ſeeds, each one dram; Sebeſtens ten pairs.* Boyl them, and diſſolve *in the Liquor ſtrained, Sugar, or Honey,* adding *Cloves, and Cinnamon,* and make a Syrup.

A Decoction of Rie is good to expel worms.

Alſo Sebeſtens, becauſe the clammineſs thereof ſtops their breath, when other ſweet things will not hurt them.

The Decoction of green Nut ſhells will kill worms, becauſe we find by Experience, if it be poured upon the ground, the worms come forth.

The Flowers of Lupins, which kills Flies boyled in milk, will alſo kill worms, and the ſeed alſo.

The uſual Syrups are bitter, as of Wormwood; and if there be a Feaver, of Endive, Succory, with, and without Rhubarb. And four, which are beſt in Feavers, as of Citrons, Lemmons, Oranges, Bar-berries, Currance, Sorrel, Vinegar, Byzantine.

Alſo their Juyces, and of Goats-Rue, Germander, Mints, Agrimony, Elicampane, &c.

Wormwood-wine, with other bitter things mentioned, as worm ſeed, &c.

Alſo Wine of the Infuſion of Groundpine, and of Agrimony.

Alſo an Infuſion of Rhubarb, Wormſeed, and Scordium in Aqua vitæ, or Brande-wine, may be given to Children.

A diſtilled Water of Wormwood, Gentian, Knotgraſs, Purſlane, Horſraddiſh, Rue, Mints, Flowers of Sloe-buſh. And if there be a Feaver, of Endive, and Succory.

Conſerves for the ſame, are of Peach flowers, Gilly flowers, Orange flowers, Lemmons, Citrons: as I have proved. Alſo the Peels candied, ſo that they may keep their bitterneſs.

To drink your own Urin, or Lye, or Brine, is alſo good.

Alſo Oyl of Olive choaks the worms, and other things that breath. And if you take as much of the Juyce of Lemmons, and give them to drink, it will kill them effectually.

Alſo Oyl of bitter Almonds, Peach kernels, Indian Nuts, and Oyl of St. Johns-wort.

Alſo diſtilled Oyls, as of Spike, or Vitriol two or three drops.

There are divers Mixtures for the ſame Electuaries or Pils.

In fear of a Convulſion, This: Take *Citron peels candied one ounce, Conſerve of Piony, Roſes or Bugloſs flowers, and of Mints, each half an ounce; of the Pouder mentioned one dram, Syrup of the Juyce of Citrons, or Lemmons,* as much as will make an Electuary. Let it be taken, and water of Purſlane, Piony, or Bugloſs, &c. drunk after it.

Treacle and Mithridate are alſo good.

Some give a drop or two of Quick-ſilver, or half a ſcruple, and it will make the worms flie away. And it may be given ſafe: as I ſhewed elſewhere.

VVater in which Quick-ſilver hath been ſteeped and ſtirred and ſtrained, doth wonderfully expel them. And you may do the ſame in wine, or other Liquor.

Give warm water that hath had Lead or Tinn quenched therein, and it will expel all ſorts of worms, as I have known by Experience.

Clyſters are given to draw worms out of the thin Guts into the thick, and keep them from aſcending. They are made of theſe following which are pleaſing to the worms: firſt giving things at the mouth that drive them down.

They are made of Milk, which may be omitted in Feavers; or of fleſh Broath, or the Decoction of Figgs, Raiſons, Barley, Wheat one pugil, with Sugar, Honey two ounces, and two Yolks of Eggs.

If we conceive that they ſtick in the thick Guts, we give in Clyſters bitter things. As, Take *Roots of Gentian one ounce, Wormwood, Southernwood, Aſarum, each one handful; Tops of Centaury one pugil, Lupins half an ounce, Wormſeed two drams:* boyl them, and diſſolve *in the ſtraining, Oyl of Wormwood one ounce and an half, Salt one dram.*

The ſame, or made of pickle or Brine, or Lead, *with one ounce and an half* of the Oyl of Bayes, Hiera picra, Aloes, Juyce of Wormwood, Gall of an Hog or Ox.

VVhen you repeat a Clyſter to fetch them out after killed, boyl them in Agarick, Carthamus ſeed, or diſſolve Benedicta Laxativa, or Hiera, or other Purgers.

If there be a Feaver, leave out theſe hot things, and uſe others that are bitter. As, Take *Endive, and Succory with the Roots, Dandelion, Purſlane, Sowthiſtle, with the Roots, each one handful; Rie one pugil;* boyl them, add

Juyce

Juyce of Beets, or Pot-Mercury one ounce and an half, Juyce or Syrup of Roses, Oyl of bitter Almonds, each one ounce; Salt half a dram, make a Clyster.

If there be a Flux of the Belly. Take *Tormentil roots, Birthwort, each one ounce and an half; Pomegranate peels, Myrobalans, each one ounce; Lentils one pugil, Myrtle-berries half a dram, red Roses one pugil:* make a Decoction, ad *Oyl of Mints one ounce,* make a Clyster.

These following things are applyed outwardly to the Navel, where the small Guts meet, and where the worms are.

The Oyls to anoint with Hands dipped in Aqua vitæ, or Vinegar first, are Oyl of Peach kernels, or bitter Almonds, Wormwood, Rue; also Oyl of Coloquintida made by infusing Oyl in the hollow of a Coloquintida Apple, or boyling the Pulp of Coloquintida therein.

Another Compound Oyl. Take *Oyl of Nuts six ounces, Juyce of green Nut shells two ounces, of Peach leaves, or Water-cresses, Vinegar of Squills, each one ounce and an half; Hogs or Ox gall one ounce:* boyl them till the Juyce be spent.

An Ointment of these Juyces is good. Take *Juyce of Garlick, or Leeks, and Wormwood, or Arsmart, or Stonecrop, each one ounce and an half; Juyce of Orris, Aloes dissolved in strong Vinegar, Gall of an Ox or Hog, each half an ounce, Aqua vitæ two drams.* If you add *the Juyce of wild Cowcumbers,* it will be better.

An Ointment or Plaister is thus made: Take *Gentian roots one ounce, Dittany, or Birthwort roots six drams, Orange peels one ounce, Coloquintida one dram, burnt Harts horn two drams, Saffron half a dram;* make a Pouder, adding *Gith seed, Agarick, white Hellebore:* mix it *with Oyl of wormwood, Peach kernels, or bitter Almonds, and wax, and Rosin,* make an Ointment or Cerot, or with Pitch a Plaister. This Pouder may be put into the fore mentioned Ointment, and with Rosin made a Plaister.

The Ointment of Sowbread is usual to anoint the Belly, which purgeth, and kills worms.

An easie Cataplasm to be made of Rie flower, or Lupins, and strong Vinegar; apply it so, or boyl it a little. To which you may add some Oyls, mentioned to keep it moist, or the Juyces mentioned.

Other Cataplasms are thus made. Take *Garlick, Onions, or Leeks,* if the scent of Garlick displease, *four ounces, Squills one ounce, Peach kernels one ounce and an half, Lupine meal two ounces, Gall of an Ox one ounce, Oyl of wormwood two ounces.*

Or thus: Take *of wormwood, Southernwood, Horehound, Mints, Motherwort, Tansey, Rue, Crosswort, Scordium, Goatsrue, Peach leaves, Centaury tops:* boyl them *in Vinegar,* beat them *with Flower of Lupins three ounces, Oyl of Peach-kernels two ounces, Aloes dissolved in Aqua vitæ half an ounce, Myrrh two drams:* make a Cataplasm.

A Fomentation for the Belly of the same Herbs boyled in Wine, Vinegar, and Water, is also good.

Also Baggs filled with the remainder of the Herbs, or the same dryed in pouder, or sprinkled after anointing.

You may apply things to the Stomach, if you suspect the worms to be there, as wormwood, Mints, Aloes, &c. And if there be a Flux ad Oyl of Mastick, Quinces, Spike, Roses, Pouder of Mastick, Roses, Cloves: and the like proper for the Stomach.

Some approve of Ointments for the Heart, of things that kill worms and Cordials: these are good in Faintings, and reach to the Stomach. Some apply them to the Pulses also, and Temples, and Back-bone.

Chiefly this following. Take *Aloes an ounce, Myrrh two drams, Saffron half a dram,* pouder them, and add *juyce of Citrons, Lemmons, or Oranges, or Rose vinegar,* for an Ointment.

Instead hereof you may moisten the pestilential Pills in the Juyces, and apply them to the Heart.

Or this Ointment. Take *the three things mentioned, and* add *Citron seeds pecled, Ivory shavings, burnt Harts horn each one scruple; red Coral half a dram, Piony seeds,* If you fear a Convulsion, *two scruples, Cloves, wood-Aloes, each one scruple:* mix them with Juyces as the former, for an Ointment or a Plaister.

Treacle may be mixed so, also with Pouders or Juyces, and applied to the Heart or Pulses.

The Urin of a Boar that is found in his Bladder, mixed with Oyl, and hung in the Smoak, is good to anoint the Pulses and Temples.

This Oyl following also to the Heart, Pulses, and Temples is highly commended.

It is made of Oyl of Scorpions in which Treacle, Aloes, Myrrh, Scordium, Gentian, white Thistle, Gith, and Vinegar are boyled.

Others make Epithems for the Heart, adding to the former Wormseed, Cordial pouders, Piony seeds, and mix them with the Ointments.

Of Amulets, they say that Garlick hung about the neck kills worms, and yellow French Lavender.

The Cure of Arse-worms.

Ascarides that breed in the thick Gut, are often voided with Excrements, greater or less. And if they come to the fundament, and cause Itching, they must be cured.

Which is done by keeping the Excrements from too much putrefaction, with good diet and purging, and things that resist putrefaction; as sour Juyces, and other Dryers, as Harts horn, and others mentioned in the Cure of Worms.

Also such things as draw them down, or kill them.

They are cured as the long worms, with Purges and proper Medicines. But especially with Clysters and Suppositories, for things taken at the mouth, loose their vertue before they come to the part. For Suppositories they are to be put into the Fundament, and tyed with a threed, being made of things that allure them. As Flesh, Fat, Lard, a little Salt, or of a Fig the inside outward, or of a Beet root, or Cabbage stalk spread over with Honey.

Also a Suppository of boyled Honey without Salt, with Pulp of Figs or Raisons boyled, and put up, doth bring them forth, though it come not it self whole forth.

And to kill them, mix Aloes, and Gall of an Ox, with Honey, without Salt at first, that it may be kept in the longer.

Clysters to kill these worms, are the same with the former, in a less quantity.

Or this: Take *Gentian, and Birthwort roots, each one ounce: Wormwood, Horehound, Arsmart, Calamint, each one pugil, Lupins one ounce:* boyl them, adding *the Gall of an Ox, Goat, or Hog two drams, Sal Gem. one dram,* make a Clyster. You may add *Hiera, Benedicta Laxativa,* or some bitter Oyls.

Also a Clyster of Lye, Pickle, Brine, or Urin, kills these worms in the Arse.

Anoint the Fundament with Quick-silver, Rosin, and Grease mixed, or anoint a Suppository therewith, this is the best Remedy to cure these Arse-worms.

The Cure of worms in the Nose.

For the Cure of all these Worms, you must as here prevent the cause that breeds them and kills them, and carry them away. As the worms in the Nose must be cured by curing the Ulcer: as we shewed in Ulcers And by the smoak of Leek seed, Wormwood, and Aloes taken into the Nose.

The Cure of worms in the Ears.

They are cured by curing the Ulcer: as was shewed in Ulcers of the Ears. And with the Juyce of Calamints, and Hemp, and as *Dioscorides* shews, with the Juyce of Capar roots, or Urine boyled in a Pomegranate shell, and dropped in.

The Cure of worms coughed up.

And with other things there mentioned. If from an inward Ulcer of the Lungs, worms be coughed up, which is seldom, you must cure the Ulcer as we shewed in the Phthysick.

If

The Cure of worms pissed forth. If pissing of worms comes from eating of any thing, as Cheese mentioned. Let them abstain from it.

The Cure of worms in Ulcers. Bitter, sharp, and cleansing things cure lousie Ulcers, and kill worms in them, as Juyce of Wormwood, Centaury, Garlick, Leeks, Onions, and Galls of Beasts.

Or a Decoction of Hellebore, Dittany, Gentian roots, Wormwood, Centaury, Calaminth, Horehound in Lye, with Bran.

Or the Pouder of Dandelion, Hogs-snout sprinkled upon the Ulcer.

Especially the Oyntment of Quick-silver.

The Cure of worms in the Navel. VVe have cured the worm that lyeth in the Navel, and drawn it out, with Flower of Lupins boyled in Vinegar, without any hurt.

The Cure of worms in the Teeth. If worms breed in a hollow tooth, they cannot remain long there, but fall out, or are easily taken out, when the teeth are cleansed.

And if they stay, and be thought the cause of the tooth-ach, stop the teeth with Aloes, and Camphire mixed with aqua vitæ.

Or take in the Smoak of Leek seed, Wormwood, and Aloes cast upon fire.

The Smoak of Henbane seed taken in with a Funnel, cures the worms in the teeth, as those in the Hands. Some write that by the taking in of those Fumes to allay the Tooth-ach, there are bred things like worms.

The Cure of worms under the Heart. They say that worms are bred under the Heart, and are killed with drinking of the Juyce of Garlick, Radish, and Water-cresses: and if there be a suspicion of their breeding by an Itching about the Heart, that may be from the worms that suck the Mouth of the Stomach, nevertheless give the same Remedies.

The Cure of Lice. Those Lice that march about, are more easily cured, then they that are fixed to the Skin: they have been in such swarms in some diseases, that they have caused death. But this is rather imputed to Divine Judgement then to Natural Causes.

The Cure is first of the Cause, then of the lousie Disease.

The Cause which is Nastiness, must be prevented and taken away. By Evacutions, if there be foulness of blood thereby, or Plethory which causeth the abundance of them: Such as we shewed in the Cure of the Itch. Among which Sweats are excellent to cleanse the skin, either with a dry or moist Bath.

To the Evacuations, joyn a good Diet, for some things drive the Excrements to the skin, and breed Lice, as Figs, and Vipers flesh: Of which we shewed the force in Elephantiasis. And for Figgs, they thought from the likeness of the seeds to Lice, that they bred them, but were deceived.

VVashing often with Lye, rubbing, and combing the Head, is good to take away Grease and Dandrough, and in other parts of the Body.

VVe use strong Dryers and Cleansers to the Disease it self, to kill the Lice, and take away filth that breeds them, which are bitter or sharper.

They cannot do it by being taken inwards. But some eat Garlick, or drink it with the Decoction of Organ, to kill Lice, and Worms. And some Countrey-fellows eat Garlick to keep off the flies.

Outward things are best to kill them, and take away Itching: as Lotions for the Head, and other parts.

As this: Take *Birthwort one ounce and an half, Hellebore roots half an ounce, Beets, Arsmart, Wormwood, Horehound, Tamarisk, Tops of the lesser Centaury, each one handful; Staphisager, Lupins, each half an ounce; Berries of the Spindle-tree, and Agarick two drams* boyl them in Lye. And wash the part affected.

It is stronger with Salt, Allum, or Niter, or Vinegar, especially of Squills.

When we wash the Head, we use things proper for it: as Bettony, Sage, French Lavender,

For Lice in the Eye-brows, wash with Vinegar, and Aloes, and Salts.

A Pouder to drive Lice from the Hair. Take *Staphisager two drams, Salt three drams, Aloes one dram, Cinnabar two drams.*

The Oyntment also of Quick-silver mentioned, is best here; for it kills infaillibly all sorts of Lice and Itch.

It may be thus made. Take *Quick-silver one dram, Turpentine two drams, Hoggs grease, Butter, or Oyl six drams*: make an Oyntment.

Or instead of Quick-silver, use *two drams* of Cinnabar, which is made of Quick-silver and Brimstone.

Or for the Lice in the Hands, use *one dram* of Sublimate instead of Quick-silver.

There are other Oyntments of Staphisager, and Grease.

Thus; Take *Staphisager half an ounce, white Hellebore one dram and an half, Pepper, Niter, each one dram; Grease, Butter, or Oyl, with a little Wax make a Liniment.*

To these add some of that with Quick-silver, or *one dram* of Sandarck.

The usual Oyntment in shops is this. Take *Staphisager, white Hellebore, Salt, Quick-silver, Hoggs grease, Oyl of Bayes, Soap, and Vinegar.*

Another Oyntment of bitter things. Take *Aloes two drams, Myrrh, Gum of Ivy, each one dram; Hogs gall, or of an Ox one dram and an half, Quick-brimstone, Allum, each one dram; Oyl of Wormwood, or bitter Almonds, as much as will make a Liniment.*

A Paste made of Ox gall, or other Gall and Meal of Lupins, and held in the Hands long, kills the worms there.

The linnen Clouts that Gold-smiths use when they guild Silver with Gold, and Quick-silver, applied to the part, kill Lice infaillibly.

The Fume of Henbane seed taken into the Palm of the Hands, kills the worms there. But we suppose it rather allayes the Itch, as anointing with the Oyl of Henbane seed, or Poppies, or Syrup of Poppies, or a little Opium dissolved in Aqua vitæ.

Smoak your Cap with Tobacco, and the Lice will be killed.

Also Tobacco ashes and Piss cureth Crab-lice.

The worms in the Hands are picked out with a needle, not thrust in deep to wet the part, and hinder the sight of them. And then wash the Hands with Wine, or Vinegar, Salt, Allum, or Niter often.

A very fine Comb will take them out of the Head.

Or a rubbing Brush which is invented for that purpose, with which Women daily cleanse their Childrens Heads.

CHAP. XIV.

Of the Voiding of living Creatures or Animata.

The Kinds.

THose Bodies are called *Animate* which live, are nourished, and grow like Plants, and yet have no sense or motion: They are preternatural, and so is the Voiding of them. These are chiefly from the Womb and the Fundament.

A Mole. There is an insensible and unmoving Body called a *Mole*, sent forth from the womb, without shape, being soft flesh without bones, full of veins, covered with a skin. Somtimes it is more membranous, and still without shape, such as I saw voided by a woman,

through the use of a Pessary after eigteen years barrenness. Somtimes it is like a Sea-star; as I have seen and cast into the water, to the great amazement of the Beholders: and somtimes it is of other forms.

This casting forth of a Mole, is like a mischance or abortion, before or after the time, with such striving and voiding of blood. And the accidents before, are like those of Women with Child. We spake of the Tumor of the Mole and its accidents, and causes in the Tumors of the Belly.

The long Membrane from the guts called Fascia.
The broad worm or fillet of the Guts called Tænia.

The like but seldom come from the Fundament, of divers kinds. One is like a long Ribband, like the final Guts, as long as they, but not hollow, a fingers breadth, this they cal a flat worm, but it is a *Tænia* or Fillet of the guts, nothing like a worm, nor is it alive or moveth: coming forth so long, that the Patient is frighted, least his Guts should come forth. In which there are black stroaks a fingers space distant all a long, like the Vertebræ or Spondils.

The Gourd-worm.

This *Tænia*, though very long, is of many little parts which may be divided, and they are like the Seeds of Gourds, and are so called from thence. This is seldom whole but in pieces, every one of which is called a Gourd-worm, but they are only pieces of the long Fillet or Fascia.

The Ligula or round point from the Guts.

There is another kind of Tænia as long as the rest, but not so broad round like a worm, and even, called *Ligula* or a point, it moveth not, seldom seen from men, but usually from doggs whol or broken, not coming forth, till it be drawn out.

There are no accidents of this Disease, but the sudden fright, and the Patient is well: Except there be a greedines before, and a heavines in the Belly. And if any part remain and stink, the Symptoms are worse then if worms died in the Belly.

The Causes.

The Cause of these Bodies breeding, is either Seed or Chyle.

Conceiving of imperfect Seed, is the cause of a Mole.

We shewed in the Swelling of the Belly, that imperfect Seed caused a Mole. And the cause of voiding it, is that of Abortion, the expulsive faculty of Nature burdned with the preternatural weight, which divideth the Vessels, by which it grows to the womb, and sends it forth the proper way: And the sooner, when there is external help: Of which we spake in Abortion.

The Chyle is the cause of the Tænia, and Gourd-worm.

As we shewed long worms bred of Chyle that is too thick or fat, so if it be so much, that it be in the thin Guts from the Stomach to the Colon, growing thereto, that Membrane called a *Tænia* is caused. This Chyle is not in the whole compass of the Guts, but in some part as broad as it comes forth, only there where the Guts are fastned to the Mesentery al a long, and is turned into these *Tæniæ* which are not alive as worms. Therefore they are somtimes as long as the small Guts. But they cannot grow in the thick Guts where the Excrements are, and no Chyle is, and from whence they will be expelled, but not from the thin Guts which contain moist and fluid matter, that may pass by. Hence it is that they may be long without any hurt but heavines of the Guts, and hunger, because they are nourished with much Chyle; till by violent motion they fall off wholly or in part into the thick Guts, and are voided whole or in pieces, as when the Chyle grows by parcells to the Guts. The plenty of clammy Chyle in the Guts is the cause, which is seldom seen, as also the Disease.

And the worse Symptomes are when they come not clean away, but stay behind, and putrefie.

The Cure.

The Cure of a Mole.

The way to cure a Mole in the Belly of a Woman, is to prevent it, and to expel it before it grow too big. For then it is difficult and dangerous, by reason of great bleeding which it causeth.

We use preventions, when we know women have had them, before they conceive, or use man; you must labor to know which seed is imperfect by considering both constitutions, and if both be out of health, to prescribe them a good Diet, and convenient Medicines.

The woman must be let blood, if there be Plethory, and purged, If there be superfluous Humors or evil, and the womb strengthened, and the rather if the Disease come from the weaknes, and want of natural heat in the womb, which cannot conveniently cherish the Seed conceived. Those are prescribed in Barrenness and Whites, and other Diseases of the womb, Among which hot Baths are excellent.

When a Mole is bred of Seed, as we shewed in the Swelling of the Belly, we must hinder its growth, and labour to expel it. But we must not use violent Medicines before we know the certainty of a false Conception, and only take away a little Nourishment by Blood-letting, and so hinder the growth, and purge away other filth, with which Nature may discharge the Mole also; and we not fear thus doing to cause an abortion, if it should be a true Conception; for many women with child have been safely purged, and had Diarrhæ's; because Nature is not so ready to cast forth things Natural, as unnatural which are burthensom.

But if we are certain that it is a Mole, by many tokens, such as women have formerly had in the same. Or if the time of delivery be past, and the swelling and hardnes remaineth, then we must give, and apply, put in, and inject into the womb, things that may expel it. And open the passages. All which we must first attempt with the same things that we provoke terms with, and then with those that expel a dead Child and Secundine; and use a Midwife, if it appear, and need be to use manual Operation. Or if all fail, we must make Incision into the womb at the belly. All these Operations are shewed in the want of Terms, and difficulty of Travail.

The Cure of Tæniæ, and Gourd-worms.

The *Tæniæ* or long Membranes, whereof one is broad, called the broad Worm, the other made of many Joynts called the *Gourd-worm*, a third is round like other worms, if they grow in the thin Guts, which is seldom, they lye very long, and being they are not certainly known, they are neglected.

But if they be suspected to be there, from stretching, heavines, and great appetite, then they must be expelled, and kept from breeding again. And the rather because they seem monstrous, like Serpents.

They are cured thus: Before they breed, the matter must be diverted that breeds them, and cleansed. But when they are bred and grown to the Guts, you must use strong Cleansers to take them off, and Purges. It is needful to give things against worms, though they have neither life nor sense, as worms have. The Diet and Medicines must be as follow.

The Chyle must be made moderate and thin, like Milk, by taking away the increase and clamminess thereof, and by cleansing it, that it stick not, and this will keep them from breeding. It must be such as was ordered in the Cure of Worms, by eating Garlick, Nuts, bitter and sharp Herbs,

Herbs, Salt, and spiced Meats, Mustard, and taking Wormwood-wine.

Purges force these from the Guts, and when they are corrupted, drive them out, and cleanse, being commonly bitter or sharp. They are mentioned in the Cure of the Worms, the best whereof are those of Aloes, and Wormwood, and sharp things often given. To which you may add Tartar, or Niter to cleanse.

There are divers Cleansers which take away the Matter that breeds them, and them also, and hinders their return; or if they return, make them sooner fall off, and come forth. They were mentioned in the Cure of Worms.

As the Powders simple and Compound, that are good here, by reason of their bitterness and cleansing. To which *Dioscorides* adds the Seed of great Sun-flower, and Gith seeds.

Also many Decoctions there mentioned are good here, and Syrups, Juyces, and Conserves.

VVormwood is best with other bitter things, as Centaury, and Horehound. Also Urin, Lye, pickle or Brine drunk, do cleanse much. Also Wine, or Water, with some few drops of Oyl of Vitriol.

Clysters reach not to the thin Guts, where these Ribbands are fixed, and therefore cleanse not so well as things taken down at the Mouth. But if some pieces of them are fallen into the thick Guts, they will carry them forth, and their cleansing quality may reach to the small Guts, if they be often administred. And for that cleansing quality you may give bitter things that kill worms.

Also Oyls, Ointments, and Emplasters, and Cataplasms, mentioned against worms, are good here to be applied to the Belly, being bitter, sharp, and cleansing, and they will in process of time do very much good.

CHAP. XV.

Of the Voiding of earthy Bodies.

The Kinds.

THe earthy Bodies that grow in Man, are Sand or Mud, Stones hard and soft, and they are preternatural, as also their Voiding. They come from divers parts of the Body which shall be mentioned, from some often from other parts seldom, or very rarely.

Sand pissed forth. Many piss Sand or Gravel, with and without another Disease.

Stones pissed forth. Also Stones are pissed forth forcibly, and this follows the pain in the Kidneys in the Cure of which these were mentioned. Somtimes Blood or stoppage of Urin went afore, or burning of Urin, or slimy Matter: As was shewed in those Excretions. Somtimes there is a

The Gravel in the Eyes. muddy white matter with the Urin with signs of the stone in the Bladder. There is often in the Corners of the Eyes and in the Eye-brows a sandie, rough Matter, brittle and yellow, which sticks to the Hair in the night, when the Eyes are shut, so that the Eyes are hard to be closed: as we shewed in the Diseases of the Eyes.

A Stone blown from the Nose. Somtimes a stone as big as a pease hath been blown out at the Nose, white and brittle, which we keep in the treasury of our Physical Rarities.

A Stone hawked forth. Not only I, but others have known stones to be hawked forth with a cough some white, some brittle, and hard, round, long, or broad, equal, and unequal. And a great difficulty of breathing hath gone before, in which Disease as was shewed, Stones are oftner kept then voided. I keep by me some such that were voided by a comely widdow, that was marryed to one in a Consumption, that infected her: Of which I spake, she voided them with great pain and coughing.

Stones under the Tongue. Somtimes other Stones have come from the Mouth, as from a swelling under the Tongue, called the *Frog*, or

In the Jawes. from a swelling in the Jawes.

Stones voided by stool. I keep at home a stone that was voided by stool; and another that came forth of a Horse that dunged.

A stony Birth. A famous Physitian of our time, saith publickly in writing, and told me that a Woman was delivered of a Child hard as a Stone.

Stones fixed in the Skin. Somtimes they grow in the Pores of the skin, and are taken out, as in the Face: I keep one by me that was taken out of the Sole of the Foot.

Stones In the ball of the Eye. One had a little Stone taken out of the white of his Eye with a Needle, and he brought it to me.

Gravel upon the Teeth like Scales. There are often scales which cover the Teeth, and they are chiefly about the Roots.

Stones from the knees of the Gout. As we shewed in the Gout, stones are often taken out of the Nodes thereof.

Stones from the Bladder. Stones are cut out of the Bladder by a Wound made in the Perinæum.

Stones from the Fistula. From a Wound in the Groyne, when a fleshy Rupture was cut, which turned into a Fistula, there came, as I shewed Sand and Stones with the Urin a long time.

The Causes.

VVe shewed in the Pain of the Reins from the Stone that Sand and Gravel and Stones came from a earthy Matter and Flegm, especially that which is mixed with water fastned in dry parts. And when other earthy Matter is gathered and fixed in certain Excrements or parts, it may do the same, because we find by Experience that wood and bones out of the Body may be turned to stones, and such are found in the Body. And we shall now shew how they breed in divers parts of the Body.

An earthy Matter in the Kidneys, is the cause of the stone. As we shewed in the Causes of the Stone, there comes sand and stones by urin from the Kidneys, rather then other parts, and they are from an earthy Matter fastned to them. And they fall from thence into the Bladder by the Ureters, and if they stay there, as great stones do, and increase by the earthy part of the urin, there is the stone of the Bladder. If they go farther, they are pissed forth: Otherwise they must be cut forth. Which we shewed was done by chance, from a wound in the Groine.

Sand fallen into the Bladder, the cause of pissing of Sand & Stones.

The earthy matter of the Liver, is the cause of Sand that is pissed, & of gravel. VVe shewed in Diseases of the Liver, that Gravel might grow there, by reason of the Serum that pierced into the Vessels, from which it might pass with the Urin to the Reins, and so to the Bladder, but stones cannot pass that way.

The sandy Matter in the Eyes, is the cause of Gravel. Also Gravel is bred in the Eyes, from water that continually moisteneth them: Or it is brought thither with tears, if they be hot and sharp, or

earthy.

earthy. And in found Eyes this fandy Matter is gathered in the Corners of the Eyes and Eye-brows, at night when the Eyes are ſhut. And in diſeaſed Eyes, if there be tears and heat, as in *Epiphora* is ſhewed.

From the ſame Cauſe come little Stones, when ſand is fixed in the hard Tunicle of the Eye.

Earthy Matter growing to the Noſe.

In the Cavities of the Noſtrils from the Earthyneſs of the water and flegm, which flows from the Brain, proceeds the ſtone that was blown out. For though ſtones are found in the Brain, yet cannot they get that way through the narrow paſſages.

An earthy Matter in the Lungs, is the cauſe of Stones.

VVe ſhewed in *Aſthma* the Cauſe of a Stone in the Lungs.

The Cauſe of Stones in the Guts is thick matter that groweth in them.

VVhen Matter lyes long, and grows hard in the Guts, from the Serum which wetteth them with the Excrements, a Stone may be cauſed there. But it is not much regarded, becauſe it paſſeth with the Excrements without pain. And this is probable to be in a man, for I ſaw the ſame voided by a Horſe. Other things turned into Stone, may be from an earthy ſalt Matter taken in, and hardned with the Excrements.

The earthy ſalt Matter in the womb, is the cauſe of a ſtony Child.

The rare bringing forth of a ſtony Child, comes from an earthy ſalt Matter in the womb which turns it to ſtone, even as other things are turned to ſtone out of the Body.

An earthy Matter in the Pores, is the cauſe of the Stone there.

VVhen Earthyneſs is in the Serum in divers Pores of the Body, it cauſeth Stones by being externally dryed, This is moſt in the Face, when it is expoſed to hot and dry Air. The ſame is the cauſe of a Stone in the Eye.

The earthy Matter of Tumors, is the cauſe of ſtones under the tongue in the Jawes, and the Gout. And the Filth of the Teeth, is the cauſe of Scales.

VVe ſhewed in Tumors, how ſtones grew under the tongue and in the Gout. And the ſame may be in other Tumors.

VVe ſhewed alſo in Filth, how from the Slime and Filth of the Teeth, Scales and Gravel grew.

The Cure.

The Cure of Stones is to be after ſome have been voided, or other ſigns have diſcovered them, from whence we conjecture that they may grow again. For that they are ſeldom, if they will not go of themſelves, they muſt be taken out.

The preventing and Cure of the Stone in the Bladder.

The voiding of Stones by Urin is not to be ſtopped but furthered, or Gravel, and the growth muſt be hindered. And if a ſtone ſtick in the Bladder, it muſt be taken out.

A Caution muſt be for the prevention of the Stone in the Bladder, as in the Reins: As we ſhewed in the Pain of the Kidneys. The Gravel grows firſt in the Reins, and falls from thence into the Bladder. And the beginning of them muſt be prevented in the reins. And then the ſtone in the Bladder will not grow ſo faſt.

For the Cure of the Stone in the Bladder, it muſt be worn, or broken, or expelled, or removed from its place, or taken out by theſe means following.

Purges are ſomtimes given, when the Body is full of evil Humors, to prepare it for things proper, that they may work the better.

And the Belly muſt be kept open: As we ſhewed in the heat of Urin from other cauſes.

Alſo ſtrong purges are given to put nature to the expelling of it, as it doth the other ſuperfluous Excrements.

As we have often ſeen, not only Excrements but ſtones have been voided by ſtrong purgers.

To all theſe are added break ſtones to diminiſh them, and break them. Theſe Purges are mentioned in the ſtone of the Kidnyes and are good here, for the vertue of them will reach to the Urin and Bladder.

Mollifying Clyſters are good, which are mentioned in many places, and Anodynes when the Urin burneth, mentioned in the Colick, alwaies adding things that break the ſtone: Such as are mentioned in the ſtone of the Kidneys, in three examples.

They who ſuppoſe the ſtone is bred of flegm, uſe Vomiting often to prevent. But it is better to cleanſe and prepare the Body, then for any thing elſe.

And this Vomiting by great ſtraining may force the ſtone from the Bladder into the paſſage.

The ſame things mentioned in the ſtone of the Kidneys are given here to open the paſſages, and to cleanſe the Earthineſs, which increaſeth the ſtone, and to make leſs the ſtone; And they are good to prevent the Stone in the Kidneys, from whence heat in the Bladder cometh. And becauſe the Bladder is farther off then the Kidneys, you muſt give the ſtrongeſt Medicines and the greater quantities, that their vertue may reach it.

As nouriſhing and Phyſical broaths, and divers Decoctions. And this: Take *Liquoriſh two ounces, Knot graſs roots one ounce, Aſarum half an ounce, Bettony, Maidenhair or Goldy locks, Mouſe-ear, white Saxifrage, Pellitory of the Wall, Sea fennel, Burnet, of each one handful, flowers of St. Johns wort, Broom, Roſes, each one pugil, Myrtle berries, Annis ſeed, Fennel ſeed, each half a handful; Grommel and white Thorne ſeeds two drams, Garden Smallage ſeeds and wild Smallage ſeeds, each one dram; Raiſons ſtoned two ounces, red Peaſe one pugil,* boyl them in *wine* and *water*; for five or ſix Doſes in a good quantity, that ſo it may ſooner come to the part affected, diſſolving in every draught, *ſyrup of Limons and Oxymel ſimple, each one ounce; Oxymel of Squils two drams.*

To this Decoction, may be added other openers and ſtone breakers, as the opening roots, ſteeped in Vinegar, Madder roots, and Mulbery roots, Rupture wort, ſweet broom, Ladies Gloves, &c.

Alſo the infuſion mentioned in the ſtone of the Kidneys and the Lies.

Alſo the juyces, as Urin, Vinegar, natural waters, and the like there mentioned, with the ſharp juyce of Barberies, and of Sea fennel, Saxifrage, St. Johnswort, of green Nuts and Leeks, given alone, or with Sugar, or other Liquor, or Decocted to a Syrup, or extract, or made into Lozenges. Thoſe of juyce of Limons and Berberies are moſt in faſhion and are very excellent and pleaſant.

Simple and Compound waters diſtilled, for the ſtone in the Kidneys mentioned, are here alſo good. If the Patient will uſe them freely.

The Urin of a Goat or Boar, is commended by *Dioſcorides*, if drunken.

Alſo Oyls mentioned in the Cure of the Stone of the Kidneys are here good.

And the ſame Diet may be uſed.

And thoſe Medicines which are divers waies prepared of which we uſe the Simples, as the Roſins of Plants. Medicines given in ſubſtance, are divers waies prepared: ſome of Simples, as Roſins, Pouders of Herbs, Blood and Aſhes of Beaſts: Some are Compounded of Plants, Animals, and the like, into Pouders, Electuaries and Pills.

Beſides which in the ſtone of the Bladder is commended Mouſe dung, Snailes ſhells, Stones in the Gall of an Oxe, the Stomach or Gizard of an Eagle that breaks bones, therefore called *Oſſifraga*, Connies blood, burnt Glaſs, Sagapenum; Euphorbium with other things mixed

mixed, Gum of Almond-tree, Vine, Eryngus roots, wild Parſnips, Elder flowers, not open being dryed, and given often. Nettle ſeed, Cappars, Water-mints.

You muſt uſe Injections into the Bladder, of ſuch things as allay Heat, mentioned in hot Piſſing.

Laſtly, to break the Stone if poſſible, uſe Oyl of Scorpions, and Medicines made of Goats blood, or Wolfes blood. Of Juyce of Lemmons, and Bar-berries, and other ſharp things, as Vinegar, with Coral, and Pearl, which often, uſed diſſolve the Stone. Theſe may be injected with other things that allay them from hurting the Bladder.

Baths to ſit in, and Fomentations, of ſuch things as relaxe, and open the paſſages, and break the ſtone, are made of ſuch things as we uſe in the Stone of the Kidneys: Which as they are there good, when applied to the Hypochondria, or under the Ribs, ſo here to the lower part of the Belly. To which add theſe, Fennel, Spignel, Saxifrage, Melilot flowers, St. Johns-wort, and other break-ſtones.

Alſo Natural Baths are good, if ſharp, and of Brimſtone, inſtead whereof, you may make Artificial of Brimſtone boyled in Water.

Oyntments preſcribed in the Stone of the Kidneys, which open the paſſages, aſſwage pain, and break the Stone, are good to be applied to the Breaſt and Back, Yard, and Stones. Among which Oyl of Scorpions is beſt alone, or with other; as Birthwort, Gentian, Cypreſs, and barks of Cappar roots boyled therein, with prepared Goats blood.

Inſtead of this, we make an excellent Oyl of Canthorides, and Beetles, and Graſshoppers boyled in Oyl, with Juyce of Raddiſh, Pellitory, and Goats blood, adding a little Vinegar of Squills.

We mentioned a Girdle with a ſtone in it, good againſt the ſtone of the Kidneys: The ſame is alſo good here in the ſtone of the bladder.

Alſo a Girdle made of divers things, uſed all night, is highly commended; as of Linnen waſhed with Juyce of Tanſey, Plantane, Houſleek, Bean flower, and Honey.

You muſt uſe Operations, when the Stone of the Bladder ſticks in the neck thereof, and ſtops the paſſages of urin; as ſhaking when the Patient lies upon his back, his Thighs drawn up, for the Motion of the Bladder and Loyns.

We thruſt the Stone of the paſſage of the Bladder with a Gatheter thruſt in, which is hollow, that the Urin ſtopped may preſently flow forth, and crooked like the paſſage of the Yard: The ſame is done with a wax Candle, becauſe it will work into the paſſage better, being ſofter.

We take the Stone out of the Bladder by other wayes; ſome ſuppoſe it may be done by applying things to the Yard, which have a property to attract the ſtone; as the brayne of a Mag-pie tyed to the Head, or Glans, and Præpuce, called the *Fore-skin*. Or they leave the Yard thruſt into a great Raddiſh made hollow.

Somtimes the Stone is expelled by forcible piſſing, after ſharp wine long retained after great Draughts, eſpecially if the lower parts be ſhaken at that time by ſtamping upon the ground with the Feet.

Somtimes it is ſucked forth of the Yard, when it ſticks there. This is down often in Infants.

We are conſtrained to cut for the ſtone as the laſt remedy, when there is great pain and ſtoppage of Urin, albeit it is not without danger of death, or Convulſions, or ſome other following impediment, eſpecially in Piſſing, which they cannot hold afterwards. But many have been thus cured, and never had ſtone after in the bladder. Some have been twice cut, by reaſon of ſome ſigns of the ſtone falling from the Reins, or left behind at the firſt, and yet have recovered, when others have died at the firſt Cutting.

The Cutters for the ſtone do thus. The Patient ſits upon a table bound to the back of another that holds him (ſo that he cannot hinder the Operation of the ſurgeon with his body or hands) with his thighs drawn up and ſpread abroad, then they put a Catheter into the Yard and Bladder, and thruſt it outwards, above the Podex in the Perinæum, or into the place between the Podex and Cods, where the Neck of the Bladder is; which thruſting out the skin, ſheweth them the way, then they make Inciſion long wayes upon the Noch of the Catheter, made for that purpoſe, and open the Neck of the Bladder, not according to the future or middle part, but upon the one ſide, then they draw out the Catheter, and put a directory Inſtrument with a pipe or guttur upon the outſide; or an Inſtrument like that which opens the Matrix, (made to enlarge the neck of the bladder) into the wound ſo made. And then with a forceps or Inſtrument made at both ends where they meet, hollow like two little ſpoons, they lay hold upon the ſtone, and draw it out, through the hollow Inſtrument, or directory Pipe, if there be many Stones, they draw often, this done, the wound will eaſily be healed, except the Body of the bladder be hurt.

When a Stone ſticks in the paſſage of the Yard it is taken out with leſs labour and danger, by cutting it out underneath, between the two Bodies.

You may take a ſtone from a womans bladder, by enlarging the neck thereof without cutting, with an Inſtrument called *Speculum Veſicæ*, which being put in, may be by degrees ſcrued, ſo that there will be room for the Forceps or Tonges to enter. And becauſe through the enlarging by force of ſo ſenſible a part, there is great pain, and ſomtimes a tearing, and wound of the part. This operation in women is not without danger of the accidents that we ſhewed would follow cutting.

There are ſome that ſay a ſtone may be taken out of the Bladder, by cutting the Belly in that part that is nigh to the ſame, and the Patient recover. This we ſaw in a Fiſher-man wounded by chance in the bladder, who had a Fiſtula after the wound, through which he voided his urin and many times ſtones and gravel.

Some ſay that by the finger in the Podex, when the bladder is preſſed down, you may thruſt down the ſtone in the bladder into the paſſage for Urin, and through the the Yard afterwards without cutting. And when one tryed it in my preſence, he brought it to the entrance of the paſſage, but there it ſtuck, till he took it out by a ſmall Inciſion. Thus by a new and leſs proviſion is the ſtone taken out, but not without danger neither, for ſome part of the bladder may be thruſt into the neck of the ſtone, and ſo cut off.

They muſt uſe the Diet for the ſtone of the Kidneys, for this of the bladder proceeds from thence, and is nouriſhed thereby, by the cleaving of earthy Matter, and ſalt of the Urin together: And the ſame things that hurt or help the one, hurteth and helpeth the other.

The Cure of Gravel in the Eye, and ſtone upon the Eye called Tophus.

For the Cure of the Gravel ſticking to the corner of the Eyes and Eye-brows, it is by taking away the great moiſture from the Eye. And this is done, as I ſhewed in the Cure of Weeping; and if there be redneſs as in the Cure of Epiphora or Rhewm of the Eye. And when the Eye-lidds are glewed together, to open them with eaſe, uſe Roſe-water, or Milk, to ſoften this Matter that grows hard, eſpecially in ſleep. The *Tophus* is upon the ball of the Eye, and hinders little, and will fall off of it ſelf, or muſt be taken off with a needle, which is without danger in that thick Tunicle of the Eye.

The Cure of Stones in the Noſe.

If a Stone be blown out of the Noſe, and you ſuſpect from a new Obſtruction thereof that there is another, you muſt preſently, uſe Errhines, or things to provoke Neeſing.

The Cure of the Stones in the Lungs.

If Stones be ſpit from the Lungs, and the ſhortneſs of breathing, and Aſthma go not away, we may gather that there are more ſtones yet, and it is good to force them away, with things that expectorate, or cleanſe the Breaſt, mentioned in Aſthma.

The Cure of Stones in the Guts. If Stones are voided by ſtool, becauſe it is the general place for to diſcharge all Excrements, you muſt do nothing, except it be to prevent the growth of them, if they come often.

The Cure of an Infant turned to ſtone. It is better to admire as a thing unheard, that the Child ſhould turn to ſtone in the womb, then to attempt any thing to prevent it.

The Cure of gravel tumors in the Pores. Gravel Tumors in the Pores, go not away with the Nails, or needle opening the skin, when in the Face. But when in the ſoles of the Feet, they are taken out by cutting and dividing the thick skin thereof.

The Cure of ſtones in the tumors of the tongue, almonds of the ears, or in the nodes of the Gout. If Stones come from a Tumor in the Tongue, or Almonds of the Ears, or the like, or from the Nodes in the Gout, you muſt cure the Ulcer. And if there be more in the tumors, and be troubleſom, you muſt bring it to matter, as an Impoſthume, that they may come forth, or be eaſily taken out. And if they wil not be ſuppurated, or the Patient be impatient of delay, open it, and take them out: As we ſhewed in the Cure of the Tumors under the tongue called *Rana* or Frog.

The Cure of Gravel in the Teeth. When we ſpake of Filth generally and particularly that of the Teeth, we ſhewed how Gravel ſhould be taken therefrom.

CHAP. XVI.

The Voiding of things that get into the Body.

The Kinds.

THings without that get into the Body, and come forth again are divers, either ſuch as get into the inſide of the Body, or only into the outſide. And they are all beſides Nature, as their voiding is, coming from divers parts of the Body.

The voiding of things gotten into the Eye. Many things come out of the eye which fel into it, and cauſed tears, pain, itching, redneſs, or ulceration: As I ſhewed in the pain of the Eyes.

The voiding of things got into the Ears. Some things creep in, or are thurſt into the Ears, which cauſe a noiſe, and deafneſs: As we ſhewin the Cure of Deafneſs, before they come forth.

The voiding of things gotten into the Noſe. Things that are drawn by breathing into the Noſe, and cauſe itching are voided by ſneeſing: And ſometimes things taken at the Mouth came out at the Noſe.

The ſpitting out of things gotten into the Mouth. Some things that fell from the noſe into the moth, are ſpit forth, or coughed out, if they fall upon the rough Artery. Or things taken at the mouth which offend the ſtomach, are

The vomiting of external things got into the Body. vomited up, or that ſtuck in the Gullet: And ſomtimes things given, as a Clyſter have been vomited at the Mouth.

Divers things taken which diſturb the Stomach, are caſt out at the Podex, and ſome without diſturbance; and ſome things are put into it, or creep into it, and come forth again.

Voiding of things got into the womb, bladder, breaſts, &c. Some things have gotten into the Matrix, and come forth again.

Some things taken have been piſſed out.

Others have been ſwallowed, and ſent out of womens breaſts.

Some ſay that things taken, or by Witch-craft thruſt into the Body, have been voided at divers places.

Hitherto may be referred things that get into the skin, and under the Nails, and come forth again.

The Cauſes.

Many are the things which by chance get into the Eyes, Ears, Noſe, Mouth, Womb, and Podex, and come forth as they went in, or otherwayes; or that hath been in the outſide of the Body. It is impoſſible to repeat them all, let the chief ſuffice, and thoſe of moſt concernment, or which are moſt uſual, and how they got in.

Things fallen into the Eye. Many times Flies get into the Eyes by chance, and get out again, as Duſt, Moates, Hairs, Sand, Gravel, mentioned in the Cauſes of the Pain of the Eye, where we ſhewed how the Eye-brows getting into the Eyes, cauſed pain.

Things in the Ear. The things that get into the Ears, and out again, are chiefly water, when they ſwim; alſo Fleas, and Lice, Chinches, Ear-wiggs, and other creeping things, as worms, the ear-wig is moſt feared. Somtimes other little things, ſuch as get into the Eyes, mentioned in Deafneſs, as a Cherry-ſtone, which getting into the Ear of a Child terrified the Parents that it might grow there.

Things in the Noſe. There are alſo ſmall things in the Noſtrils by breathing, and are either preſently blown out, or ſneeſed forth, or falling into the Mouth, are ſpit out, or upon the rough Artery, and are coughed out. Other little Creatures that creep into the Noſe, in ſleep, cannot ſtay long, becauſe they provoke ſneeſing by tickling.

Things gotten into the mouth, is the cauſe of their voiding by ſtool, vomit, or urin. There are divers things that get into the Mouth, that are voided by ſtool or vomit, with griping of the Belly, or without.

Some kind of Meats eaten, are thrown out again, not only unconcocted, as in a Lientery-flux; but when the Stomach is ſound, and yet they are unconcocted, and come forth as they went in, becauſe they were taken in too great quantity for concoction, being fat or unctious, and then there is a voiding of fat, as we ſhewed, or are too hard to be concocted: As we ſhewed in the Colick, how one voided Cheeſe that he had long before eaten immoderately. And we ſaw two maids which after Clyſters voided abundance of Cheſnuts: And one in a Dyſentery voided Cheſnuts, which he had plentifully eaten, ſome weeks before.

For the moſt part, that which cannot be concocted in a mans ſtomach, is ſent out unchanged, as in beaſts, as are Cherry and Prune ſtones, and Cornil-berry ſtones, and of the like Fruits, as Medlars that are as ſtones very hard, five of which were ſent to me for ſtones of the Kidneys, which upon Examination I diſcovered.

You may plainly ſee the skins of things, as Fruits, and the like, in the ſtools unchanged, when the inſides are digeſted, eſpecialily after eating of Peaſe, which the vulgar count unholſom therefore.

I ſaw many Hens bones voided by a woman after a clyſter, who had eaten hens feet for a diet.

Beſides Meats, many other things are taken in and voided. As ſome Creatures quick, ſome dead, which being whole. could not be digeſted, come forth ſo, contrary to other Creatures, who ſwallow mice, ſerpents, and the like,

like, (as I have a Cod fish swallowed a Beetle) and digest them whole, and though it be alive, yet they hurt them not.

As it is manifest that a foolish fellow swallowed an Eel by jesting, and voided it by stool the next day, after great torments, dead, and as it were stead.

I knew a Soldier that in his sleep upon the ground, had a Lizard that crept into his Mouth to his Stomach, by which he was miserably tormented, but voiding bones by stool, he was free.

Some Fools, and Melancholick persons, that hear noise in their Guts by wind, perswade themselves that they have swallowed Snaks, and the like, as Froggs by drinking of Froggs-spawn, when they swam in the River. But this is false, because if these or other Creatures get into the Belly, which is hard to be done, they can live no longer, but are stifled, and killed with heat.

Hairs are swallowed and voided again, and if you look upon them while hot, you wil think they are alive by their motion. Thus the people think true, and I knew an Impostor, that gave little short threads in pills, to make them think they voided worms, and after shewed them how they moved, and deceived many. I have seen, and have by me balls of hair found in the stomachs of Calfes, and Goats, made of hair they swallowed, compacted, and knit together, and hard all over. The like may be in a Man, if he should swallow hairs, as they delight to do.

Some earthy things are voided, as swallowed as sand, Clay, Stones, and Metals. As a Fool who for gain sake, swallowed Flints as big as Nuts, suddenly, and filled his Stomach, so that you might hear them rattle, wash them, and swalow them again in our sight. And I saw a woman that had swallowed Quick-silver, who voided it in my Chamber, while she was declaring to me the same. These no man can digest, being hard and earthy, as Sand and Stones, but I have observed certainly that sheep digest them, and Wolves in time of famine preserve themselves by eating Clay, and I keep by me stony Clay, taken out of the Stomach of a Wolfe, as a rarity.

Many Artificial of Earth or Wood, swallowed by chance, except they stay in the Guts, are voided by stool, as a bullet which some swallow for death. Other Drunkards, and mad Men swallow glass that they have chewed.

One Drundard swallowed a spoon, wherewith he was eating Milk, being thrust by his Companion, which the next day hung at the Fundament, and was voided, after great pain.

Vesalius reports of one that lying with a Concubine, swallowed down her great golden Crucifixe, she had about her Neck, least it should be found about him, and voided it again.

A famous Physitian writes that one swallowed a knife in a cloath, and after great pain thereby, it produced a great Impostume in his Groine, and was there cut out, he living long after.

The famous Physitian of *Regiomont* writes a Book of the swallowing of a knife taken out of the stomach by Incision

Another writes that a Needle swallowed, was voided forth at a Vein.

A Physitian to be beleeved, did certainly affirm to me, that a Needle came forth of a Womans Breast with the Milk.

Many things taken at the Mouth, are vomited up presently. Some, if they go aside, as they say, (and fall upon the rongh Artery, as Crumbs of Bread, after Water is drunk, or the like, they are coughed up again, or forced into the Nostrils with the Drink.

Some sticking in the Jawes, hinder swallowing and breathing, and somtimes choak; as Thorns, Bones, and Money swallowed: As we shewed in the Defect of the Throat, which stopt in the way.

Rhasis shews that a Horsleech suck'd in by chance, stuck in the Throat.

Some things eaten, and passing from the Guts by the Meseraicks, have been pissed out, as Oyl in great quantity drunk off, and the like, neither doth that which swims upon the urin come alwayes from the Kidneys.

We shewed in the Treatise of Urin, that worms eaten with Cheese, have gotten to the Bladder, and have been pissed out.

Also some sand passing through the Meseraicks, may make the Urin gravelly, for it is not necessary that it be bred in the Body, which is rare.

I have observed also, that Birds bones eaten, have been pissed out at a wound of the strait Gut, which was fistulated, and pierced the neck of the Bladder.

Vomiting of Clysters. Clysters ascending out of the thick guts into the small, and so into the Stomach, have been vomited up.

Horsleeches are applied to draw Blood from the Hæmorrhoids.

A Countrey-man told me that his Neighbour carrying a quick Mole in his Pocket, had him so far in his Podex, that they could not get him forth without killing.

One told me of a Mouse that got into a Womans Matrix, and not unlikely, for women are very fearful of them.

We shall not here mention things put into the Body by Witch-craft.

Things like bones, hairs, and other things are bred in Impostumes, but they are not here to be spoken of, because they come not from without, except put in by Magick, which also may depend upon a Natural Cause: As we shewed in Tumors that impostumated.

Those that cleave to the skin and are taken off, are chiefly filth, not that which is from within, of which we spake, but that which by touching filthy things in the Hands, Feet, and under the Nails, which infects them, and makes them black, as we said in Discolouration. Telling of Money infects the Hands much, though the desire thereof tolerates the chief cause is, that so many thousands of Lepers, Beggars, and infected persons have handled it. Among Creatures, Fleas do most usually stick to the Body to bite, and suck blood, which we suppose, are not bred as Lice from the Body of Filth, but come from without, as we shewed, and appears, because they have a different shape from Lice are red, creep not, but skip with two long feet, they feed not of filth as Lice, but of blood. Nor are alwayes about the Body, and change their place; and though they may breed in Dogs, or increase there, yet not in a Man, whose Filth is distinct, as other Creatures have other Lice, from the diversity of their Excrements and Filth: which is not only from their Bodies, but from the Nests of Birds.

Horsleeches. Horsleeches are applied to draw blood, and seldom fix upon Swimmers in the River: As we see sometimes the little Horsleeches stick to the Fish.

The Cure.

These, or the like, getting into the Body by falling, or being taken in, or creeping in. If they continue, and we know not, or if we know not of them, are neglected, but if they declare themselves by hurt or pain, then we must get them forth, as we said in the Symptomes of some of them. And when they come of themselves, this is to be commited to Nature, and the pain must be helped, and they forwarned when they come forth.

The Cure of things fallen into the eyes. Slowly it was prescribed in the Cure of the Pain of the Eyes, how things got in night be taken out, and what you should do when the Hairs of the Brows hang in the Eyes.

Into the Ears. We shewed in Deafness, how you should take things out of the Ears.

Into the Nose. Things drawn or gotten into the nose, are sneesed out by their tickling, or they get into the mouth, and if into the rough Artery, they are coughed out, and spit out.

And

The Cure of things got into the Mouth.

And so are they that get in by the Mouth, or by the Nose, you must use Expectorations, if they be in the rough Artery, and not let the Patient be choaked, as is reported with a Flie.

If they stick in the Gullet, or about the Throat, as we said of Horsleeches, and the like, which endanger Suffocation, we shewed the Cure in the Hindrance of swallowing.

If they come into the stomach, if they cause not vomiting, you must give a Vomit.

If they go into the Guts, and out at the Podex, help with Clysters, and Instruments, if they stick there.

The Cure of things in the Podex.

If Clysters are vomited up, it is an evil sign, and when it is so in the Colick, you must cure it as was shewed in the Colick.

Horsleeches after they are filled with blood, will fall off, or be taken off. If they will not off, cut their tayls, (which they do to make them suck after emptying) and they fall off, or sprinkle salt or ashes upon them, which will make worms depart.

That Mole which got into the Podex, caused great pain with his Feet, when drawn out, till they kill'd him, and hurt the Podex, that it was after cured, and so did the Mouse in the womb of which we spake.

The Cure of things creps into the Womb.

We shewed in the Cure of Filth coming from within, how you should cure Filth without.

The Cure of outward Filth.

The Filth which is under the nails, for want of paring, must be taken away by paring.

The Cure of Filth under the Nails.

It is not our purpose to shew how Fleas are driven from Chambers, Beds and Cloaths, but that you may with a Decoction, wash your Body to keep off Fleas and Lice.

To keep off Fleas.

Horsleeches fall off as we shewed before of themselves, or by Art.

The taking off of Horsleeches.

FINIS.

READER, when you find any Diſeaſe ſet down in this Table, be very careful to ſearch the whole Chapter for the ſeveral Kinds and Cauſes of the Diſeaſe, as well as the Cures, leaſt you miſtake.

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FINIS.

Bartholinus Anatomy. Riolanus Anatomy

A Golden Practice of Physick by Dr Plater.

a precious water for the eyes, against Inflamation
Blearedness mists fistulas and such like. it rusty ye first day
Take 2 bottls of greeke wine half a pinte of white rose
water of Each bind two ounces of fennell but Eybright as much
of Each halfe an ounce of Aloes as much Sugar Candy of
Roses one dram Camphir halfe a dram and as much allom
Each is thus ye best Let it be beate & extinguished six times
in rose water mixed wth greeke wine; but Let the water
at last be Left out: powder what are to be powdred finely
& mix them wth the waters: allom is thus incorporate wth
waters: ~~then put it to the rest~~ Because it will not be
powdred Let it be put into a mortar wth a little of the
forementioned waters, and beate togather until it turne
to water & swim about in droppings & mix wth the
waters then put it to the rest Let them all in a glass
bottle close couered, and warped up that it doe not exhale
a broade in the Sunne and Dew for forty dayes, Still shaken
them fower times in Eday at last when it is well sunned Let it
up & reserue it for use itt must be thus applyed
for inflamations bloodshotts or fistulas Let the patient
lye on his back & when a drop of this water is put upon
the eye Let him open & shutt his Eye Lidds yt ye water may run
through all the Cavities of the Eye, doe this 2 or 3 times in
a day a dust But for a pearle in the Eye
If the pearle be about or beneath the Cornea make a powder
of Sugar Candy of roses burnt Allome & the bone of a Cattle
flesh very finely beate & searced exactly & when ye patient
Lyes Crinkle a little of this powder upon his Eye & by & by drop
some of this water into it & Let him shut his Eyes & close for
hee will Quickly be cured.

A plague waters

Take 3 gall of old malligo 2 ounces of long pepper: 1 ounce of
whole ginger halfe ounce of nuttmegs 1 good handfull of rue & a
handfull of Sage & peny wort of Safron ye pepper nutmegs & ginger
beate them in a mortar togather put ye wine into a pipkin and
put the spices & ye rue Sage & Safron into the wine Let them
boyle till ye 3 quarts are come to two then straine it & wth
ye pipkin then put ye wine into the pipkin then put 2 ounces
of Venis treacle & 2 ounces of Mithridate & one pinte of Rot
Angelica water & put them into the pipkin and Let them to
Simmer ie gather until ye Ingredients are all Dissolued then
taike it of & Let it stand till it be pretty coole then put it
in the glasses where ye wine come out of: if ye party be bad
& deadly inserted Let them taike one quarter of a pinte
and keepe warme. Otherwise 2 spoonfulls in ye morning

more direction first if ye fitts ye Last inserted taike a vomit presently upon a full stomach
also Let him bleed on that side ye Lying appeares: if it appeare in the neck bleed him on the basilick
on ye same side it appears if under ye arme ye Barbunets appeary bleed him on ye cubitall
of the arme on ye same but if it appeare in the groyne breath he vaines on the ankles on the same
side of none appeare consider wth parts are Cold grieued and proceed in bloodletting according
to former rules:- Sweating is a very good remedy wch ye may effect wth Mithridate London or
venis treacle or matthioli his greate Mithridate his Extract water Serpentary roote Elecampe one:
Let his blood be cooled wth the Julep & no other drinke taike Burtshorne & Ivory of each halfe an
ye flew of Englos & nags heads flowe gillyflowers rosemary & marygold of each 2 drams
of ye roots of Petasites & Zedory of each 3 drs of the root of Storzonera one dram boyle them all in a
pottle of water to a Quart adding towards the end of ye Direction of Saffron and Shorthanded of each
a dram straine it & add to it Syrup of violets flowe gillyflowers & Mellisa fully of each
one ounce oyle of Sulphur 12 drops Let him drink a Draught of this soft as hot as he can dry
if he be strongest vse Clysters

reform & comfort him wth Cordiac ... corrobo ...
Electuario ... Cordials to mundata morbifici Gallici mitigata Magisterium &c.
& Corallarum pulvis Catroynica Bezoar orient &c
provoke him to stool wth Diatrionum but not in the beginning of the disease if he vomit mu
stay it wth 3xiiitum mentha
if swellings arise ye may know whether they be likely to breake if it lye deep in the flesh
& looks white it is not likely to breake ye must then annoynt wth oyle of ~~white~~ lillys
& Camomell if it rise to a head looke red & lye not deep it will breake then
take a yonge pidgeon pull of her feathers from her taile & hold her bare fundment to th
swelling holding the bill close in yor hand & it will draw out the venome or vomi-
tt & apply draws ye venome
when brought to the swelling fall down again upon yor best way is to take a pigeon
slit a sharp knife quite thro' the breast to the back breake her open and while
she is yet alive apply her to the place of ye stinge if this do no good apply a cupping
glass to the place where the sore is broken apply a mollifot plaister to it & a tons
wth Linimentum Artici and make no greate hast to heal it vp: ye may let bloo
The most desperate remedy is whilst natural heate remains wrap him
ye naked in a blanket wett in cold water & it will get him in a most violent
sweate & purge out the corruption from ye blood: vomitque salutifer orbi

Xtof Allcocke

℞ one pound of ye best venis Turpentine halfe a pound of the best yellow wax 2 ounces of ye best red Sanders in powder 3 pints & a halfe of Sallet oyle & halfe a pint of Sacke first taike ye wax melt it in a brass kettle over a gentle fire taike ye Turpentine & put it in a Large Gally pot put to it one pinte of Running water & the beate it first wth out then wth Rose water vntill it be as white as Snow, note yt ye running water after it is beaten must be powred & drawn from it but ye Rose water may remaine in it
the turpentine thus prepared put it into ye wax and stir them well together but let them not boyle then powre in yor oyle & let them boyle together for a little while then taike it of the fire & put in the Sanders beaten otherwise it will runn over then let them boyle none an houre more cease stiring it, then taike it of ye fire & let it stand till it be cold then melt it againe & straine it through a cloth into the pott you will keepe it in, note yt ye Sack is to be put in wth the Turpentine

---

Mirrh 2 struples 6 grains · Rubarb i℈ gentian Roott i℈
century topp & Oranges pills of each i℈ the best Aloes i℈ & half
Cremor Tartar ℥ grand half a dram

---

for pills ℞ Aloes 3℈ Rubarb 1℈ Gallop — 3 struples
Cremor Tartar 1 struple Diagredium 1 struple 2 sweete fennell seed
florentine Orris 1 dram Agarick 1 dram infused in white
wine vinegar wth one dram of Gentian roote & wth yt Juice
or infusion strayned make vp yor Mass for pills

---

1 struple & halfe Diagredium grand first wipe
saffron 1 struple · Aloes 2℈ Mirrh 1℈ 1 struple
Rubarb · i℈ 6 grains · Zedoary 1 struple 10 grains
Pouder of Bottony 2 struples 6 grains · wth
i ℈ agarick infused in white wine vinegar &
Juice of Lemons q.s.

Gallop 1 scrup 4 grain Stroum 1 scruple · Diagredium halfe a dram · aloes ℈
Rubarb 2 struples 3 gr

